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BINGE AND BINGEABILITY
THE ANTECEDENTS AND CONSEQUENCES OF BINGE WATCHING BEHAVIOR

A Dissertation in
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by
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ABSTRACT

Binge watching, or watching multiple episodes of a given television program in a single sitting, has become increasingly popular as viewing-on-demand (VOD) services such as Netflix and Hulu have emerged. However, much of the research into the phenomenon has explored the various motivations users have for binge watching. The goal of this dissertation is to extend previous research by exploring 1) characteristics of shows that may influence the likelihood that particular program will be binged and 2) exploring how the narrative engagement process differs for binged and non-binged programs.

Following a pretest designed to help define binge watching and examine shows that are and are not binge-watched, two studies were designed. First, a survey was conducted to examine which content (i.e., plot complexity, character complexity, suspense, quality, and seriality) and non-content (i.e., social pressure and availability) influence bingeability—the likelihood that a show will be binged. Results from Study 1 indicate that suspense and seriality both significantly predicted bingeability, as did social pressures.

Following this, a 2 X 2 quasi-experiment was designed, manipulating both suspense and whether a show was binge watched to examine both narrative engagement (i.e., transportation, identification, and parasocial interaction) and narrative outcomes (i.e., enjoyment, appreciation, likelihood to recommend, and psychological well-being). The suspense manipulation failed and was removed, but the results indicate that those who did not binge watch reported greater parasocial interaction over time, greater enjoyment, appreciation, and likelihood to recommend. Further, indirect effects were found, indicating that binge watching had a negative impact on
intention to recommend through positive appraisals. These results and their implications for both theory and practice are discussed.
TABLE OF CONTENTS

List of Figures ............................................................................................................................ vii
List of Tables ............................................................................................................................. viii
Acknowledgements ..................................................................................................................... ix

Chapter 1 Introduction and Literature Review ............................................................................. 1
  Literature Review ..................................................................................................................... 2
    Defining Binge Watching ................................................................................................. 2
    Bingeability ..................................................................................................................... 6
    Enjoyment and Appreciation of Binge Watching ............................................................. 13
    Post-exposure Outcomes of Binge Watching .................................................................. 19

Chapter 2 Pretest ......................................................................................................................... 22
  Methods ................................................................................................................................. 22
    Participants ..................................................................................................................... 22
    Measures ......................................................................................................................... 22
  Analysis ................................................................................................................................. 23
    Content differences in binged and non-binged shows ..................................................... 25
  Discussion ............................................................................................................................... 27
    Genre differences ............................................................................................................. 28

Chapter 3 Study 1 ......................................................................................................................... 29
  Methods ................................................................................................................................. 29
    Participants ..................................................................................................................... 29
    Procedure ....................................................................................................................... 29
    Independent variables ................................................................................................. 30
    Dependent Variable ....................................................................................................... 33
  Results ................................................................................................................................ 33
  Discussion ............................................................................................................................. 36

Chapter 4 Study 2 ......................................................................................................................... 39
  Methods ................................................................................................................................. 39
    Participants ..................................................................................................................... 39
    Procedure ....................................................................................................................... 39
    Stimulus ........................................................................................................................... 41
    Independent variables ................................................................................................. 42
    Measures .......................................................................................................................... 44
  Results ................................................................................................................................. 47
Manipulation Check ........................................................................................................... 47
Hypothesis Testing ............................................................................................................. 48
Further Exploratory Analyses ........................................................................................... 53
Path Model ....................................................................................................................... 58
Results Summary .............................................................................................................. 61
Discussion ........................................................................................................................ 61

Chapter 5 General Discussion .............................................................................................. 64

Theoretical Implications ..................................................................................................... 69
Binge Watching ................................................................................................................. 69
Engagement ....................................................................................................................... 70
Social Aspects of Binge Watching ................................................................................. 70
Practical Implications ....................................................................................................... 71
Limitations and Directions for Future Research ............................................................ 72
Conclusion ......................................................................................................................... 73

References ......................................................................................................................... 75

Appendix A: Pretest Questionnaire .................................................................................... 81
Appendix B: Study 1 Questionnaire ................................................................................... 87
Appendix C: Study 2 Questionnaire ................................................................................... 97
LIST OF FIGURES

Figure 1. Path Model Showing Indirect Effects...........................................................................59
LIST OF TABLES

Table 1. Emergent Themes from Pretest.................................................................25
Table 2. List of Shows Generated from Pretest ......................................................27
Table 3. Five Most Common Shows Listed by Participants According to Condition 30
Table 4. Zero-order Correlations Between All Variables ........................................35
Table 5. Multiple Regression for Predictors of Bingeability ...................................36
Table 6. Perceptions of Suspense by Episode for Suspense Manipulation ..........44
Table 7. Perceptions of PSI by Episode .................................................................49
Table 8. Predictors of Likelihood to Recommend ..................................................51
Table 9. Means and Standard Deviations for Method of Recommendation ..........53
Table 10. Bivariate Correlations ..........................................................................54
Table 11. Factor Analysis 1 Pattern Matrix ............................................................55
Table 12. Factor Analysis 2 Pattern Matrix ............................................................56
Table 13. Factor Analysis 3 Pattern Matrix ............................................................57
Table 14. Predicting Likelihood to Watch Second Episode .................................60
Table 15. Predicting Likelihood to Watch Third Episode for Non-Binged Condition 61
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Chapter 1  
Introduction and Literature Review

With its roots in television marathons and DVD box sets, binge watching is not a new phenomenon. However, with advents in technology, it has become more prevalent than ever before. Specifically, the introduction of Netflix’s video-on-demand (VOD) service in 2007 (Jenner, 2014) insured that viewers can watch available programming at their own leisure, and many of those viewers have turned to watching in excess. According to Marketing Charts, ("The State of Traditional TV: Updated With Q2 2017 Data," 2017), with data from Nielsen, the percentage of time spent watching television programming in the traditional sense dropped between 2015 and 2016, while watching utilizing VOD services on other devices rose in that same time period.

Alongside the rise of VOD services, new programming options have also emerged – shows which often feature slower-paced narratives, complex characters, and few single-episode story arcs. These types of shows have been developed by Netflix in particular, seemingly with the express purpose of encouraging binge-watching behavior (Jenner, 2014). Indeed, these types of programs are designed to be viewed as one cohesive story divided into several parts, encouraging continued viewing from one episode to the next.

Despite the rise in binge watching and the influx of programming that allows for this behavior, the effects of binge watching are only speculative at this point. While cultural studies has begun to examine binge watching and narrative differences (see Jenner, 2014; Jenner, 2015), empirical research on the topic has mostly examined the uses and gratifications of binge watching (Pittman & Sheehan, 2015) rather than the effects.
The relative novelty of VOD binge watching means that academic—and particularly empirical—research has not yet examined many of the complexities involved in the binge-watching process. Thus, this dissertation has two main goals: to determine the content features that influence whether a show is likely to be binged and to examine the effects of binging and bingeability on narrative engagement, enjoyment, appreciation, and psychological well-being.

**Literature Review**

**Defining Binge Watching**

Early work on non-traditional television viewing suggests that individuals using VCRs to “time shift” their television watching consume more television, but diversify their television diets, watching a larger variety of shows (Van den Bulck, 1999). However, this pattern of behavior has seemingly changed with the advent of VOD services, which remove the need for the viewer to actively record and fast forward their programming. Binge watching as currently understood, however, necessitates *concentration*, rather than diversification, of the media diet; viewers binge specific shows, rather than several shows spread out across channels and networks. Thus, it would seem that something in the media landscape has changed to facilitate this change in behavior.

As a theoretical construct, binge watching has yet to be fully explicated. This is partially due to the pure novelty of it; while individuals have long been able to marathon television programs as they appear, or even watch multiple episodes of a television series via DVD box sets, only recently has the wide array of choices in both programming and streaming platform become available, thus mainstreaming binge watching.

The novelty of the construct of binge watching means that an agreed-upon definition has not yet been developed, leading to wide disagreements as to what constitutes a media binge.
Harris Interactive, working on behalf of Netflix, defined the term as watching more than one episode of a program at a time (Shannon-Missal, 2013). Merikivi, Salovaara, Mäntymäki, and Zhang (2017) seemingly support this definition, arguing that binge watching refers simply to “consuming more than one episode of the same television show in one setting” (p. 2). This seems to be the definition most often utilized by empirical researchers (cf. Pittman, 2015; Schweidel & Moe, 2016).

However, this definition appears to be lacking. Firstly, it ignores differences in television programming length that could potentially change how someone approaches the viewing process; almost three full 22-minute sitcom episodes could potentially be watched in the same amount of time as a one hour-long Netflix original drama.

Perhaps more importantly, however, this definition does not account for the sense of excess inherent in the term. Binging implies that the behavior is being taken to some extreme. Since an extreme can only be examined with regards to an accepted norm, binge watching may mean something different to different people. Indeed, for some individuals, “more than one” may be a sufficient definition for binge viewing; however, for others, this number would need to be higher. As such, binge watching implies variability in behavior due to individual differences (Jenner, 2015). Thus, rather than conceptualizing binge watching as an actual behavior, it may be helpful to think of it as a perception of a behavior. That is, one individual may perceive watching two episodes of a program to be binging, while another may perceive that same number of episodes to be within their own accepted norms.

Also important to note is the sense of control inherent to binge watching. This sense of control is what has the potential to separate binge watching from more traditional forms of television marathons. Cable television has, for quite some time, scheduled marathons of
syndicated programs profitable for networks due to the lack of expense in producing new content (Kompare, 2010). These syndicated marathons represent a precursor to modern binge watching due to their passive nature. Prior to the advent of time-shifting technology, the viewer could only watch—they could not choose to watch a different program or different episodes of the same program unless it was being shown on another channel.

The popularity of the VCR as a media recording device had the effect of giving the viewer more control over when and where they consumed particular television shows. According to Lin (1993), VCRs gave individuals the ability to time shift as well as build their own personal media libraries, allowing viewers to watch a much larger variety of programming whenever the desire struck.

Even more control became available with DVD box sets, on-demand services, and DVRs. At this point in television history, viewers began to be able to record programs on television or purchase DVDs to allow for extended television watching sessions. These new technologies allowed for a greater sense of control; viewers could skip commercials on recorded television or consume media without embedded commercials in the form of box sets. More importantly, they could watch when they wanted to, not beholden to cable programming.

However, the advent of VOD services like Netflix, Amazon, and Hulu broadens choices even further, with Netflix alone offering “thousands of TV shows and movies available to watch instantly on any device that streams Netflix” (“How Does Netflix Work?”). These platforms even encourage binging through algorithms that keep episodes playing with minimal effort (McCormick, 2016). Given the increased control viewers now have over their viewing experiences, the definition of binge watching should include some aspect of control as well.
Marathoning vs. binging

There has been some discussion in academic circles that the term “binge watching” is negatively connoted. This conceptualization seems to be based on the word “binge” itself, which can conjure images of extreme drunkenness or overeating. Some scholars have taken to instead using the term “media marathoning.” According to Perks (2015), “media marathoning connotes a conjoined triumph of commitment and stamina” (p. ix) in contrast to the negative images elicited by the term binge watching. However, it seems that, in popular usage at least, binge watching is the preferred nomenclature, with numerous newspaper and magazine articles exploring the phenomenon. Further, while binge watching may seem to result from compulsion or otherwise seem addictive, viewers themselves do not necessarily see binge watching as problematic (Devasagayam, 2014). It seems that, in contrast to binge eating or binge drinking, binge watching may not necessarily be perceived as a negative thing, at least by those engaging in the activity.

Additionally, while marathoning may elicit more positive responses to the term, there appears to be confusion as to what the term actually refers to. As used by Perks, media marathoning seems to be synonymous with binge watching. However, traditional television marathons do not afford viewers the sense of control that seems to be necessary for binge watching; in television marathons, participants have only the choice to watch or not—they cannot choose the time or episode they wish to engage with. Additionally, television marathons tend to be shown out of order, and they sometimes lack a cohesive story. Thus, to avoid confusion between traditional marathoning and media marathons as discussed by Perks, and to be consistent with popular usage, “binge watching” will be the term used throughout the present
studies, and a pretest will further explore the definition of binge watching, as articulated by television viewers.

**Bingeability**

Researchers studying binge watching have begun the process of exploring user motivations for binge watching. Pittman and Sheehan (2015), for instance, found that users were likely to be motivated to binge watch for purposes of relaxation, engagement, and hedonism. Further, Flayelle, Maurage, and Billieux (2017) argued that TV viewers specifically binge watch for purposes of immersion, entertainment, and sociability. Further, Peña (2015) found that binge watching produced different gratifications than did week-to-week viewing. Finally, Steiner and Xu (2018) found that viewers are motivated to binge watch for a number of reasons, including catching up on previous episodes and feeling included in cultural conversations. However, such Uses and Gratifications approaches focus primarily on aspects of the user, rather than any qualities of a particular show that may encourage binging.

Bingeability—or the likelihood that a given show will be binge watched—refers specifically to qualities of a given show, and can be thought of as originating from two broad categories: content features and non-content features. In terms of content, four classes of features likely play important roles: plot, characters, suspense, and quality. The first of the content features discussed here is the program’s plot. According to Busselle and Bilandzic (2008), narratives are constructed when a viewer merges the story’s plot with existing schemas. The authors liken the process to a train moving along a track as the track is actively being constructed. In a sense, narratives are not a completed object; rather they are a process by which the viewer makes sense of the story.
Different types of television stories offer different types of narrative journeys. Episodic programs, in which storylines are typically contained within the constraints of a single episode, offer quick journeys that conclude with the episode. However, programs that are more serialized consist of a single, major overarching storyline broken into a number of different episodes. In this situation, watching one episode is not sufficient for understanding the plot; the viewer is left with a sense of curiosity and suspense that is not fulfilled by the end of the episode. Thus, it seems that in these sorts of programs, the viewer builds up momentum throughout an episode by slowly receiving bits and pieces of plot that propel the story, and, when that episode ends, this momentum may induce them to continue watching.

For example, the television program *Law and Order* is a crime procedural in which a crime is committed, the police investigate it, and the district attorneys prosecute. Most of the time, the investigation is concluded after only one episode; rarely is the investigation revisited in more than a passing manner in later episodes. After watching an episode of this program, the viewer should feel fulfilled in that the narrative is neatly wrapped up; there is no need to continue watching to further understand the story.

This episodic sort of program lies in stark contrast with a television program like *House of Cards*. This Netflix Original program is highly serialized, so much so that even the episode titles reflect only their place in the story—Chapter 1 all the way to Chapter 52 (McCormick, 2016). This program across all seasons follows the exploits of Francis Underwood in his pursuits to gain political power. On their own, individual episodes tell small parts of the larger series’ story; only in combination with each other does the plot begin to unfold. Thus, it may be more likely that a viewer will continue watching after the first episode in order to learn more about the plot and to continue internally constructing the narrative.
The second content structure related to bingeability is the story’s characters who drive the plot forward. In addition to program form, characters provide an additional aspect of content that is likely to contribute to bingeability. Characters serve as the entry point for viewers; a person to whom to attach themselves so that they can contextualize the events of the story through the eyes of the character; this internalization of the character is known as identification (Cohen, 2001).

Further, the characters are central to the viewer’s enjoyment of the story. According to affective disposition theory, initialized by Zillmann and Cantor (1972), viewers are active moral monitors who carefully attend to the actions of the characters within the program, eventually forming dispositions about those characters. Characters who do good things are well-liked, and it is these characters who the viewer wants to succeed. In contrast, characters who commit immoral actions are disliked, and the viewer does not want to see them rewarded.

Raney (2004) updated this theory, arguing that viewers may not in fact approach new stories with a blank slate, but instead—in line with later theorizing by Busselle and Bilandzic (2008)—come armed with existing genre schemas. Viewers start new programs with partially formed dispositions already in place, and the actions of the characters as time goes on may change those dispositions, but it is likely that the viewer will interpret actions with these initial dispositions in mind. For instance, a police officer protagonist will be deemed good from the beginning, and the viewer may justify immoral actions committed by such a character rather than making changes to the disposition.

Different types of stories have different types of characters. In episodic programs, character dispositions may be formed quickly, and characters are unlikely to vary much from initial impressions. For instance, Detective Benson from Law and Order: SVU is a good person, and, within the tightly plotted episodic program, is unlikely to offer evidence to the contrary.
However, a long-form serialized narrative has time to more fully explore character morality, such as portraying the long slide into depravity from *Breaking Bad’s* Walter White (Mittell, 2015). Since the serialized narrative takes much longer to explore character morality, the viewer may feel curious as to how the character will change, especially when there is a great deal of conflicting information about the character’s morality. Thus, they may feel more compelled to keep watching, to gain more information with which to form or change dispositions about compelling characters.

Suspense is another key content feature that can be instrumental in determining whether a show is ultimately considered bingeable. Suspense involves a sense of uncertainty—the viewer is thrust into a situation where liked characters’ fates are uncertain (Zillmann, 1996). Suspense can be tied closely with disposition theory; viewers desire good outcomes for liked characters, and suspense is created when these good outcomes are in jeopardy or when bad outcomes seem likely (Zillmann, 1996).

According to Zillmann, Hay, and Bryant (1975), the resolution of suspense is linked with decreases in arousal, indicating that individuals feel a sense of relief when suspense is resolved. However, it stands to reason that, if suspense is not maintained, there is less motivation to continue watching the program, given that relief—a positive affective response—has been achieved. Thus, it seems that shows that maintain a sense of suspense are more likely to be binged.

According to Zillmann (1996), it is entirely possible for episodic programs to cultivate suspense. While the protagonists’ fate is likely to be restored to the status quo at the end of the episode, there are a series of events that occur within the episode that trigger suspense, such as the threat of pain or loss. With that said, episodic programs are more likely to resolve suspense
by the end of a single episode rather than maintain it over the course of several episodes. Episodic shows, therefore, introduce relief and thus disincentivize continued watching.

Finally, the quality of the show must be taken into account. According to Pittman and Sheehan (2015), shows deemed to be high in quality were significantly more likely than lower quality shows to be binge watched indicating that quality is predictive of bingeability. Indeed, programs that are seemingly designed to be binged seem to attain acclaim. For instance, the 2017 Primetime Emmy Awards saw seven programs nominated for Outstanding Drama Series. Of the seven, three were produced by Netflix (e.g., *The Crown*, *House of Cards*, and *Stranger Things*), and the eventual winner, *The Handmaid’s Tale*, was produced by Hulu ("69th Emmy Awards Nominees and Winners"). These nominations signal a high level of quality coming from VOD-produced television programs. These types of shows are highly serialized and hosted on platforms that make binge watching easy or even encouraged; thus, quality must be examined in concert with other content factors.

In sum, it seems that type of narrative should be instrumental in whether the program is likely to be binged or not. Serialized narratives offer longer stories that give a sense of “narrative inertia” and present complex characters that need more time for the viewer to form dispositions. They also are more likely to create a sustained sense of suspense. Therefore:

H1a: Plot complexity of a program will be positively associated with bingeability.

H1b. Complexity of a program’s characters will be positively associated with bingeability.

H1c. Suspense will be positively associated with bingeability.

H1d. Quality of a program will be positively associated with bingeability.

H1e. Seriality of a program will be positively associated with bingeability.
Other considerations for bingeability

Of course, there are features external to the content to be considered in terms of bingeability. The first of these is availability. Video-on-demand (VOD) services like Netflix offer thousands of television program offerings that are freely available to binge watch, these services do not necessarily host every program that a viewer may wish to watch. Further, shows that are popular on cable, network, or premium cable are not available to binge watch even on their own VOD platforms until after the specific episode has been aired on television, usually on a weekly basis. Thus, likelihood to binge watch may be based not only on the nature of the content but also the availability of the program to binge watch. It is possible that a viewer might want to binge watch their favorite program, but do not do so because they do not have the ability to do so. With that said, availability cannot be thought of as the only consideration. After all, Netflix alone offers thousands of programs that could potentially be binge watched. Yet, certain shows are more popular than others; thus, considerations other than availability must also be considered.

Social pressures may potentially have an impact on whether individuals are likely to binge watch a program. According to Morrison and Krugman (2001), television serves an external function in that it gives people something to talk about with others; in particular, the authors found that children feared isolation from peers when not watching the correct programs. This indicates that social pressures may have an impact on what individuals watch. Additionally, Xu and Yan (2011) suggest that individuals can feel connected to others through television viewing, specifically because shared television program choices can strengthen bonds between the viewer and her immediate social circle, a global community of fellow watchers, and even
unknown others. Conversely, not seeing certain programs may isolate the individuals from social groups.

According to Levy (1987), viewers use television viewing, including the method by which they consume television programming, to fulfill social utility. Individuals are able to integrate the content of the program into their social conversations. While Levy examined VCR use in particular, the advent of VOD services has changed the conversation to integrate binge watching into social utility. This research is supported by Flayelle and colleagues (2017), who found that sociability was one of three major motivations participants cited for watching particular television programs.

Further, if someone feels ostracized because they have not seen a certain program, it stands to reason that they may feel compelled to watch as many episodes of that program as possible to “catch up” to others in their social group who have seen more of the show. Thus, they may choose to binge watch this program to quickly bring themselves up to speed. Supporting this, Steiner and Xu (2018) found that one of the main motivations for binge watching was cultural inclusion; interviewees explained that shows that colleagues and friends were discussing were assumed to be culturally important; thus, viewers were highly motivated to binge those shows to be able to join the conversation. That said, this explanation cannot account for why certain programs become popular in the first place, or how much of the program the individual is willing to binge.

Based on this line of reasoning, the following hypotheses are proposed:

H2a. Programs that are more available are more likely to be binged.

H2b. Viewers are more likely to binge programs that are subject to social pressures.
Of course, while understanding content and non-content factors as they relate to bingeability is important, it is also vital to examine the ways in which individuals process both bingeable and non-bingeable programs. Thus, the next section will discuss how the narrative engagement process may differ between bingeable and non-bingeable shows, as well the influence binging may have.

**Enjoyment and Appreciation of Binge Watching**

Presumably, content creators and VOD services both desire positive responses to the entertainment content. According to Nabi and Krcmar (2004), enjoyment is an evaluation of a particular piece of media entertainment, incorporating cognitions, affect, and behavior. Under this conceptualization, viewers do not only enjoy entertainment based on how it makes them feel, but also based on the judgments they make and their behavioral intentions toward that media. Overall, enjoyment is a wholly positive experience, which tends to accompany entertainment content that is pleasurable or fun in nature (Oliver & Bartsch, 2010).

However, enjoyment is not the only possible viewer response. Rather, entertainment content that is more complex and somber in nature may instead produce appreciation. Appreciation refers to a more reflective, pensive state that is marked by mixed affect (Oliver & Bartsch, 2011). Both enjoyment and appreciation are deeply rooted in the content of the media in question, and—in the case of story-driven programming—the narratives.

**Narrative engagement**

As previously mentioned, narratives are created when readers merge the text with their own existing knowledge schemas, weaving the two together to create the narrative experience (Busselle & Bilandzic, 2008). As this process occurs, the viewer becomes intensely involved in the narrative, losing awareness of the self and becoming totally immersed within the story. This
involvement is called “narrative engagement” (Busselle & Bilandzic, 2008). Necessary for this engagement are mental models of not only the plot itself (e.g., the situational model), but also the story world and the characters. As the viewer engages with the story world and characters, they become sucked in, becoming attached to characters (i.e., identification and parasocial interaction) and placing themselves entirely within the setting (i.e., transportation).

The first component of narrative engagement, identification, occurs when the viewer internalizes the thoughts, actions, and feelings of the major characters at play, such that they perceive relatively little difference between them (Cohen, 2001). Self-awareness is lost as the viewer peers into the mind of the character, feeling as though the actions happening to the character are happening to them. The viewer not only understands the trials and tribulations undergone by the character but internalizes them, experiencing them as the character would.

This internalization process distinguishes identification from parasocial interaction. While identification involves very little social distance between the viewer and the media character, parasocial interaction occurs when the viewer is aware of the distance and treats the character as an acquaintance, friend, or other type of interpersonal relationship. Initially discussed by Horton and Wohl (1956), parasocial interaction refers to a simulated interaction between a media persona and the viewer that is entirely one-sided (i.e., the media persona gives output to the viewer but does not receive input) but gives the illusion that it is two-sided. The viewers interact with the media persona similarly to the way they would in a face-to-face interaction, orienting themselves to be in the media persona’s line of sight or even responding vocally to the persona (Schramm & Hartmann, 2008). Over time, these interactions can cumulate into a relationship; viewers begin to see the persona as a trusted friend or hated enemy and respond accordingly when the relationship is severed (Cohen, 2004). According to Cohen
identification, rather than parasocial interaction, requires a deeper sense of absorption into not only the story, but also the characters themselves, as the viewer must develop empathy and position themselves as the character. Thus, identification should be associated with more intense feelings of engagement than parasocial interaction.

Of course, character is not the only relevant portion of narrative engagement. Transportation refers to the process by which viewers become totally immersed into the story world, losing awareness of the world around them and focusing entirely on the story (Green & Brock, 2000). It is a vicarious experience in which the viewer is able to escape their everyday reality without physically traveling. Unlike related concepts, such as flow or presence, transportation is inevitably linked to the story itself, encompassing more than the setting and directly involving the plot (Green, Brock, & Kaufman, 2004). Thus, certain stories have the potential to be more transporting than others based on the structure, quality, and complexity of the plot.

Binge watching a television narrative may alter the ways in which viewers engage with the program. One of the main distinctions is the amount of time between episodes. When a television program is not binged and is watched on a weekly schedule, the viewer has a full week for engagement to wear down, meaning that the viewer must reengage every time they watch another episode. In contrast, when a viewer binges a story, there are only seconds between one episode and the next; there is no need to reengage because the viewer is still engaged from the previous episode.

Given that binging does not allow enough time for engagement to decay, it seems that binge watching can trigger a type of momentum not previously explored in other modes of watching. To understand this process, it may be helpful to draw on the theory of excitation
transfer. According to Zillmann (2008), excitation transfer predicts “an enhancement of emotional reactions to immediately present emotion-arousing situations by portions of excitation that are left over from preceding related or unrelated emotion-arousing situations” (para. 1). Essentially, an individual is placed into a situation in which their emotions are aroused; this arousal is relatively slow to decay, even after the stimulus is finished. This residual excitation left over after the initial arousing experience can be intensified when a new arousing situation is introduced, causing arousal to be higher than it would be had residual excitation been allowed to decay.

Engagement, which features cognitive aspects and is likely to be more long lasting, is not the same as arousal. However, the process by which engagement momentum builds over the course of several episodes may follow a similar pattern to excitation transfer. In a binged setting, engagement should intensify reactions to later episodes because residual engagement does not have time to dissipate. This pattern should not be observed when there is time to disengage between episodes.

Previous research into binge watching and engagement variables seems to support this line of theorizing; Warren (2016), for instance, found that number and length of television viewing sessions positively predicted overall transportation, emotional investment with the content, and mental rumination. Thus, it seems that binge watching can positively impact at least some portions of engagement.

Therefore:

H4: Individuals binging narratives will report higher engagement than those not binging as more episodes are consumed.
When a program is binged, the time between episodes is much shorter than it would be if the episodes were not binged. Binging, then, gives the viewer less time to make sense of the plots they have been presented with along with less opportunity to anticipate.

However, when examining a program as a whole, rather than episode-length segments, binging offers the viewer many more pieces of the plot and characters in one sitting, potentially streamlining the deliberation process and allowing the viewer to make sense of the story much more quickly. Thus, although binging may give a viewer less time with which to deliberate, it may actually lessen the need for that time.

Additionally, Busselle and Bilandzic (2008) argue that narrative outcomes like enjoyment and appreciation are positively predicted by levels of engagement. As engagement rises, so too should enjoyment and appreciation of the narrative. Given that binged narratives are thought to increase engagement, they should also then increase the narrative outcomes associated with engagement.

Therefore:

H5a: Those who binge watch a program will report higher levels of enjoyment than those who watch week-to-week.

H5b: Those who binge watch a program will report higher levels of appreciation than those who watch week-to-week.

**Anticipation and suspense**

As previously mentioned, programs that are suspenseful are thought to be more likely to be binged. However, the question of what happens when that suspenseful show is actually binged remains open. Previous research into suspense has suggested that media high in suspense are more likely to be enjoyed (Klimmt, Rizzo, Vorderer, Koch, & Fischer, 2009; Hall, 2015).
Enjoyment appears to stem from a resolution of uncertainty, particularly when the ultimate outcome is a desired one (Zillmann, 1994; Peterson & Raney, 2008). With that said, however, the question of whether viewers enjoy suspense itself or the *resolution* of suspense arises. According to Zillmann (1994), suspense has been thought to generate feelings of anxiety and indecision; it is a negatively-valenced, emotionally intense, reaction to suspenseful fare. Due to the heightened state of excitation viewers enter when watching suspense, positive resolutions heighten feelings of relief and enjoyment, while negative resolutions induce feelings of despair. However, until suspense is resolved, the experience is necessarily uncomfortable and unlikely to produce positive emotional responses.

Thus:

**H6a:** Individuals watching more suspenseful programming (i.e., story is unresolved) will experience less enjoyment than those watching less suspenseful programming (i.e., story is resolved).

**H6b:** Individuals watching more suspenseful programming (i.e., story is unresolved) will experience less appreciation than those watching less suspenseful programming (i.e., story is resolved).

With discussion of suspense also comes discussions of anticipation. According to Wulff (1996), anticipation refers to “equally calculating, expecting and evaluating a coming event” (p. 1). As a viewer sees a portion of a narrative, they process what has happened and utilize clues left by the program as well as their existing genre schemas to anticipate what events are to occur. Anticipation arises when a television viewer has the opportunity to process what they have seen and begin mentally exploring things that may come in the future. Although it is related to suspense, anticipation differs in that it refers to the viewer’s internal expectations of what is to
occur; contrastingly, suspense refers to the emotional state a viewer experiences while uncertainty is present. Anticipation of a particular event may heighten suspense, while anticipating a different event may lower it.

While binge watching a program allows for engagement to build by reducing the amount of time which may allow engagement to dissipate after each episode, this reduction in time also greatly reduces the amount of time available for anticipation to build. Without the necessary time to consider events that have happened, anticipation cannot build. Viewers thus do not have the time to evaluate events that have happened and imagine potential resolutions or hardships to come.

Therefore:

H5: Anticipation will be higher when a program is not binged.

Post-exposure Outcomes of Binge Watching

Narrative engagement and outcomes such as enjoyment and appreciation refer to responses to a narrative as it occurs. However, stories do not stop impacting viewers simply because they end; rather, narratives can have long term impacts on a viewer, both in terms of the viewers’ psychological states and their post-viewing behavior.

Psychological well-being

It seems that binge watching television programing, especially shows that are complex in terms of plot and characters, may result in increased narrative engagement. However, the question of whether or not this increased immersion is beneficial to viewers’ psychological well-being is still open. According to Snider (2016), narratives that are highly complex may result in mental exhaustion and cognitive overload, with these traits being exacerbated by binge watching. Reinecke and Eden (2017) pose that, although television watching in general can serve
restorative functions for viewers, binge watching in particular may reduce their potentially restorative effects, actually serving to deplete viewers instead. This is due to the compulsion associated with binge watching; striving to constantly watch “just one more episode” actually serves to mentally and emotionally exhaust the viewer (Reinecke & Eden, 2017), especially when the media content is emotionally challenging to begin with.

In contrast, there is also some evidence that binge watching may serve to enhance psychological well-being. For instance, Matrix (2014) argued that binge watching can reduce stress and “satisfy intellectual curiosity” (p. 130). Due to the uncertainty surrounding the relationship between binge watching and psychological well-being:

RQ2: What is the relationship between binge watching and psychological well-being?

Social interactions and media recommendations

Traditionally, television viewing has been strongly linked to a “water-cooler effect,” or the “conversations that take place around the water cooler after an event” (Hanna, Rohm, & Crittenden, 2011, p. 7). Because television programming has traditionally been scheduled at a given time and date, conversations surrounding a specific program can be informally scheduled for the next day. Before the advent of VOD services, missed programs were difficult to catch up, and often times would simply need to be skipped. Likewise, the water cooler effect could easily be skipped as well, given that conversation was likely to happen in person at a given place.

However, the nature of television and discussion have both changed; television programming is now available online at the viewer’s convenience. Additionally, the “water cooler” no longer exists in a solely physical space but also online through social media. Thus, if a person misses an episode, it is difficult to avoid social discussion about the program.
This online discussion space has offered places for individuals who enjoy a program to engage with others about it. For instance, Barkhuus and Brown (2009) found that most participants enjoyed discussing a television program after viewing, pointing toward the social function of television viewing.

In terms of recommendation, previous research has suggested that individuals are likely to recommend products or services when they have positive attitudes toward the sender and the message (Phelps, Lewis, Mobilio, Perry, & Raman, 2004). This should hold true for recommendations of television programming as well. Thus, programs that are enjoyed and appreciated should be recommended to a higher degree. Therefore:

H7: Enjoyment and appreciation will be positively associated with likelihood to recommend.

Additionally, since binge watched programs are thought to impact both enjoyment and appreciation—although the direction is currently unknown—the following RQ is also posed:

RQ3: What is the indirect effect from binge watching to likelihood to recommend through enjoyment and appreciation?
Chapter 2

Pretest

Methods

Prior to addressing the research questions and hypotheses posed, a pretest was conducted with two purposes in mind. The first goal was to define binge watching and explore the valence of the term as understood by participants. The second was to compile a list of television programs to be used in the first study. A survey was conducted using a combination of open-ended and close-ended questions to address these goals.

Participants

A total of 349 participants were recruited via snowball sampling. A link to the questionnaire was posted on Facebook, and participants were encouraged to share the link on their own Facebook pages upon completion. Participants ranged in age from 18 to 79 years ($M = 38.89$) with 80.2% self-identifying as female. In terms of ethnicity, 84.0% of participants identified as White, 5.1% identified as Black, 1.1% identified as Indigenous, 9.1% identified as Asian, 3.7% identified as Hispanic/Latino and 1.1% identified as another race or ethnicity. It should be noted that, due to the sampling method, a large percentage of participants (37.7%) work in higher education, followed by health care (13.1%), professional services (8.9%), and K-12 education (8.0%).

Measures

Participants were randomly assigned to one of two groups—one group was instructed to think about a show they had binge watched, while the other was instructed to think of a show they had watched on a week-to-week basis. Participants who indicated that they never binge watched were automatically pushed into the week-to-week condition. After listing the name of
the program, they were asked to explain why they binge watched it (in the binge condition) or why they watched it on a week-to-week basis (in the week-to-week condition). They were asked to classify the program in terms of genre, and to name the service they used to watch the program and the length of the program. Following this, participants were asked to give a definition of the term “binge watching,” and to list the number of episodes of a program that must be watched before a television watching session becomes a “binge.” Participants were then asked to explain whether they considered the term binge watching to be positive, negative, or neutral. The questionnaire ended by asking participants about their television watching habits. All questions can be found in the Appendix.

Analysis

To address the first goal of the pretest, the open-ended data asking participants for their definition of binge watching were explored utilizing thematic analysis (Braun & Clarke, 2006). Three major themes emerged from these responses, examples of which can be found in Table 1. The more salient of these seems to be Consecutive Viewing—participants explained that binge watching occurs when a number of episodes are watched in a single sitting. For these participants, a key to binge watching seems to be that episodes are watched back-to-back at one time. These participants did not necessarily identify a given number of episodes or amount of time necessary to reach a threshold (though some did), indicating that it is the back-to-back nature—rather than a specific number of episodes—that may be important to binge watching.

The second emergent theme identified is called Exclusion of Other Options. A number of participants articulated that binge watching necessitates the exclusion of other entertainment options. For instance, one participant said, “I consider binge watching to be watching one show from beginning to end without watching other shows between episodes; it may occur in one
sitting or over multiple days. Essentially, any TV viewing is dedicated to finishing that one program.”

However, exclusion does not simply refer to the rejection of other television programs; other participants mentioned that binge watching displaced other activities, including necessary family or school obligations. For instance, another participant defined binge watching as “Watching an extremely large amount of one show in one sitting, whether it is an entire series or season or many, many episodes at once. Therefore, ignoring all real responsibilities of life.”

The final theme identified within this open-ended question is Excess. Participants indicated that binge watching implied a sense of overindulgence. This may be a carryover from the word “binge,” the very definition of which explicitly states excess. This theme also covers feelings of compulsion that some participants identified.

Participants were also asked to list a specific number of episodes required to meet the threshold for a binge session. For a 30-minute program, the mean number of episodes was 4.89 ($SD = 3.8$). For a 60-minute program, fewer episodes were required, with a mean of 3.64 ($SD = 6.5$).

Finally, the valence of the term “binge watching” was explored. When asked, 67.5% of participants either stated that the term itself was neutral or that the term could be positive or negative depending on the circumstances. Almost a quarter (24.3%) considered the term to be wholly negative, and 8.3% thought it to be wholly positive.
Table 1. Emergent Themes from Pretest

<table>
<thead>
<tr>
<th>Theme</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consecutive Viewing</td>
<td>“Watching multiple episodes back to back without a break.”</td>
</tr>
<tr>
<td></td>
<td>“Watching multiple episodes of a show in a row (sometimes an entire season)”</td>
</tr>
<tr>
<td></td>
<td>“Binge watching to me is watching multiple episodes of the same show back to back.”</td>
</tr>
<tr>
<td>Exclusion of Other Options</td>
<td>“Watching an extremely large amount of one show in one sitting, whether it is an entire series or season or many, many episodes at once. Therefore, ignoring all real responsibilities of life.”</td>
</tr>
<tr>
<td></td>
<td>“Watching multiple episodes of a show &amp; this may impede on you doing things you should be doing like house work, homework, etc.”</td>
</tr>
<tr>
<td></td>
<td>“I consider binge watching to be watching one show from beginning to end without watching other shows between episodes; it may occur in one sitting or over multiple days. Essentially, any TV viewing is dedicated to finishing that one program.”</td>
</tr>
<tr>
<td>Excess</td>
<td>“The urge for ‘just one more!’ is what defines binge watching.”</td>
</tr>
<tr>
<td></td>
<td>“Watching an excessive amount of a single show in a single sitting.”</td>
</tr>
<tr>
<td></td>
<td>“I’d classify binge watching as spending an abnormal amount of time (i.e. 5+ continuous hours in a day) watching one show.”</td>
</tr>
</tbody>
</table>

Content differences in binged and non-binged shows

A list was compiled of the top 10 shows listed in either category. Because there was a tie for the 10th most-listed show in the binged condition (i.e., *Outlander* and *The Keepers*) both shows were retained. The list generated by this process illustrated very little overlap between
shows that were binged and shows that were not, with one exception (i.e., *Grey’s Anatomy*). See Table 2 for a full list of programs used in Study 1.

Additionally, there were clear genre differences between shows that were binged and shows that were not. To explore these genre differences, a series of 2 x 2 chi-square tests were run with condition (i.e., 1= binged, 2 = non-binged) as the independent variable and genre as the dependent variable.

Results of the genre analysis show that significant differences were present for thrillers, $\chi^2(2, N=350) = 6.99, V^* = .14, p < .05$. A larger proportion of individuals in the binge condition (16.6%) indicated that the program they listed was a thriller compared to those in the non-binged condition (7.53%).

There were also significant differences found for dramas, $\chi^2(2, N=350) = 25.88, V^* = .27, p < .001$. The majority of participants in the binge condition (67.48%) listed their show as a drama, in comparison with those in the non-binged condition (40.86%).

Reality television also illustrated significant differences, $\chi^2(2, N=350) = 14.70, V^* = .21, p < .05$. A very small percentage of those in the binged condition (3.68%) reported watching reality television programs, while a larger percentage of those in the non-binged condition (16.13%) listed their show as reality television.

The results also indicate a significant difference between binged and non-binged programs as mysteries, $\chi^2(2, N=350) = 6.40, V^* = .14, p < .05$. A larger percentage of participants in the binged condition (12.27%) listed mystery programs than did those in the non-binged condition (4.84%).
Table 2. List of Shows Generated from Pretest

<table>
<thead>
<tr>
<th>Show</th>
<th>Binged or Not Binged</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>House of Cards</em></td>
<td>Binged</td>
</tr>
<tr>
<td><em>Grey’s Anatomy</em></td>
<td>Both</td>
</tr>
<tr>
<td><em>Breaking Bad</em></td>
<td>Binged</td>
</tr>
<tr>
<td><em>The Unbreakable Kimmy Schmidt</em></td>
<td>Binged</td>
</tr>
<tr>
<td><em>Gilmore Girls</em></td>
<td>Binged</td>
</tr>
<tr>
<td><em>Game of Thrones</em></td>
<td>Binged</td>
</tr>
<tr>
<td><em>Stranger Things</em></td>
<td>Binged</td>
</tr>
<tr>
<td><em>Shameless</em></td>
<td>Binged</td>
</tr>
<tr>
<td><em>Orange is the New Black</em></td>
<td>Binged</td>
</tr>
<tr>
<td><em>Outlander</em></td>
<td>Binged</td>
</tr>
<tr>
<td><em>The Keepers</em></td>
<td>Binged</td>
</tr>
<tr>
<td><em>Big Bang Theory</em></td>
<td>Not Binged</td>
</tr>
<tr>
<td><em>NCIS</em></td>
<td>Not Binged</td>
</tr>
<tr>
<td><em>Scandal</em></td>
<td>Not Binged</td>
</tr>
<tr>
<td><em>This is Us</em></td>
<td>Not Binged</td>
</tr>
<tr>
<td><em>Modern Family</em></td>
<td>Not Binged</td>
</tr>
<tr>
<td><em>Real Housewives</em></td>
<td>Not Binged</td>
</tr>
<tr>
<td><em>RuPaul’s Drag Race</em></td>
<td>Not Binged</td>
</tr>
<tr>
<td><em>Downton Abbey</em></td>
<td>Not Binged</td>
</tr>
<tr>
<td><em>Law and Order</em></td>
<td>Not Binged</td>
</tr>
<tr>
<td><em>Madame Secretary</em></td>
<td>Not Binged</td>
</tr>
</tbody>
</table>

Note. * indicates that a show has more than one iteration that were combined

Discussion

Based on the results of the thematic analysis, combined with the close-ended data collected, a definition of binge watching can be derived. Binge watching refers to the back-to-back viewing of consecutive episodes of a single television show to the point of excess. Binge watching requires focused attention on the program at hand, and as such, other activities and other entertainment options are ignored for the sake of completing the program. While participants did identify a number of episodes required for a binge when specifically asked, they often did not mention such a number in their open-ended data. Thus, it seems that there is not
necessarily an agreed upon number of episodes that are required before a viewing session becomes a binge.

Additionally, the term binge watching does not appear to hold the wholly negative connotations that other types of binging (e.g., binge eating, binge drinking) convey. While a portion of participants did think that the term was negative, most participants found the term to be value neutral, or to at least differ in valence based on the context. Thus, the term itself seems does not seem to have the problematic negative overtone that some scholars have argued, at least among the participants surveyed here.

**Genre differences**

The results of this pretest indicate differences in genre between shows that are binged in contrast to those that are not. In particular, binged shows are more likely to be thrillers, genres, and mysteries—the types of shows that are more likely to be highly serialized with complex plots and characters—while non-binged shows are more likely to be reality television—programs with no plot and relatively flat characters. These findings indicate that content does potentially make a difference in which shows are binge watched and which shows are not, and from these results, it appears that variables such as complexity of character and plot, seriality, and suspense may be key in explaining the decision by viewers to either binge watch or not. These preliminary notions are studied more fully in Study 1.
Chapter 3

Study 1

Methods

The purpose of the first study was to explore how different content variables may contribute to the bingeability of a given television program. Further, the study aimed to establish the extent to which that extra-content features (e.g., social pressures) influence bingeability.

Participants

A total of 299 participants were recruited from Amazon Mechanical Turk. Most of the participants were White (79.9%), followed by Black (10.0%). and Asian/Pacific-Islander (8.0%). The gender split between participants was roughly even, with 51.5% being male. The average age among participants was 36.10 ($SD = 11.56$).

Procedure

Prior to starting the questionnaire, participants were administered informed consent. Participants were then randomly assigned to one of two conditions, binged or not binged. Participants who indicated that they never binge watched television were automatically assigned to the non-binged condition. In the binged condition, participants were first asked to think of a show that they watched via binging and name it (See Table 3 for a list of programs generated by participants). After describing the show, they were presented with each of the independent and dependent variables. Then, they were redirected to the list of shows originated in the pretest consisting of the 21 shows participants reported either binging or watching week-to-week most often. They then selected up to two shows from the list that they had binge watched to answer questions about. Overall, they rated three shows—one that they listed and two that they chose from the predetermined list.
Participants again answered each independent and dependent variable about each program.

For those in the non-binged condition, the layout of the questionnaire was identical; the only difference is that they were asked to choose programs that they watched on a once-a-week schedule. They chose from the same list of television shows, but were instructed to select shows that they had watched week-to-week.

By beginning the questionnaire with an open-ended question, participants were not restricted to the researcher’s idea of what bingeable shows may look like; at the same time, later choosing from a list allowed for a relatively narrow set of television programs to examine. The questionnaire ended by ascertaining demographic information, as well as general television-viewing behavior.

Table 3. Five Most Common Shows Listed by Participants According to Condition

<table>
<thead>
<tr>
<th>Non-Binged (n=150)</th>
<th>Binged (n=149)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game of Thrones (n = 26)</td>
<td>Game of Thrones (n = 18)</td>
</tr>
<tr>
<td>Walking Dead (n = 9)</td>
<td>Breaking Bad (n = 12)</td>
</tr>
<tr>
<td>Modern Family (n = 4)</td>
<td>The Walking Dead (n=8)</td>
</tr>
<tr>
<td>Shameless (n = 4)</td>
<td>Ozark (n = 6)</td>
</tr>
<tr>
<td>Supernatural (n=4)</td>
<td>Orange is the New Black (n = 6)</td>
</tr>
</tbody>
</table>

**Independent variables**

All independent variables, unless otherwise noted, were measured on 7-point, Likert-type items with 1 representing “strongly disagree” and 7 representing “strongly agree.” Since each
item was measured three times, scales for each measure were constructed for each instance. Then, the three scales were combined into a single, overall index. All items can be found in the Appendix.

**Character complexity.**

Since there does not yet appear to be a validated measure of character complexity, three items were created based on existing manipulations of character morality (Krakowiak & Oliver, 2012). Character complexity was measured using three items, such as “The protagonist in this program sometimes does bad things to get what they want” and “I feel that the main character is morally ambiguous.” The scale was found to be reliable with Chronbach’s alphas of .67, .67, and .70, and an overall alpha of .59.

**Plot complexity.**

Plot complexity will be measured by adapting coding schemes from the Index of Narrative Complexity (Petersen, Gillam, & Gillam, 2008) into three continuous, Likert-type items. Sample items include “The story is shown from multiple points of view” and “The characters in the story face many complications.” The overall measure was found to be reliable with a Cronbach’s alpha of .76 ($\alpha_1 = .81$, $\alpha_2 = .81$, $\alpha_3 = .88$).

**Suspense.**

Suspense was measured with five items adapted from Knobloch and colleagues (2004). Sample items included “Generally, I find this program exciting” and “The show grips me.” The created index was found to be reliable, with Chronbach’s alphas of .87, .87, and .87, and an overall alpha of .72.
**Seriality.**

To measure seriality, a series of three items were used, such as “I could not miss an episode of this program and still keep up with the story” and “This show has a long storyline that stretches over multiple episodes.” These items are based on research done by Mittell (2015). These items resulted in reliable indices ($\alpha_1 = .76$, $\alpha_2 = .79$, $\alpha_3 = .77$, overall $\alpha = .64$).

**Availability.**

Since current measures of availability tend to focus broadly on technology availability, new items were created to better reflect the more narrow scope of the variable as conceptualized here. Availability was measured using three items, including “I can watch this show whenever I want” and “This show is easy to find when I want to watch it.” Cronbach’s alphas were .76, .79, and , .77 (overall $\alpha = .78$).

**Social connection.**

Social connection was measured utilizing the “immediate circle” subdimension of the Feeling Connected via Television Viewing (FCTV) scale (Xu & Yan, 2011). This subscale included five items, such as “I think there is a good chance friends/peers around me will talk about this show on some occasions” and “As far as I know, many of my friends/peers watch this show.” The scale was reliable, with Cronbach’s alphas of .92, .90, and .89 (overall $\alpha = .72$).

**Quality.**

Three items indicating quality were created, including “This program is of high quality” and “Most people would agree that this is a good show.” ($\alpha_1 = .83$, $\alpha_2 = .86$, $\alpha_3 = .91$; overall $\alpha = .81$)
Dependent Variable

As bingeability is a novel construct with no existing measures, three items were created on a 7-point, Likert-type scale with 1 as “strongly disagree” and 7 as “strongly agree.” Items included, “Given the option, I would prefer to binge watch this program as quickly as possible” and “I would enjoy watching several episodes of this program in a single sitting.” The scale was found to be reliable, with Cronbach’s alphas of .81, .83, and .80, and an overall alpha of .84.

It must be pointed out that, while reliabilities for each individual show that participants rated were high, they dropped when the three shows were combined into a single index. This is thought to be due to variance introduced by the content of the shows; it was entirely possible for participants to choose shows that were different in length, genre, or topic area. These differences between shows could cause variance not seen within each show. Additionally, because participants could—but were not required to—chose additional shows from a list, it is possible that the decision by some participants not to choose additional shows may have negatively impacted overall reliability. However, given that the goal of the study was to understand the phenomenon across a wide variety of television programming, these scales were utilized even when the reliability was lower than it otherwise would be.

Results

First, 2 X 2 chi-square tests were employed to determine if there were differences in the percentages of people who did not select additional programs from the predetermined list according to condition. The results of this analysis show no significant differences in the percentages of people who no additional shows from the predetermined list, $\chi^2 (1, N = 299) = 0.00, p = .98$. Neither were their differences detected between conditions for the percentage of participants who selected only one additional show, $\chi^2 (1, N = 299) = 2.12, p = .35$. Thus, the
results indicate that the generated list was equally indicative for both binged and non-binged shows.

Additionally, to check the validity of the list of 21 programs originated by the pretest, 2 X 2 chi-square tests were conducted. Show selection was coded as either 1 for shows participants in the pretest indicated they binged or 0 for those shows that participants indicated watching on a week-to-week basis.

For the first selection, there was a significant difference between whether participants chose a binged show or a non-binged show based on condition, $\chi^2 (1, N = 263) = 9.13$, $p < .01$. A larger percentage of those in the binge condition chose binged shows (87.02%) than did those in the non-binged condition (28.03%).

A similar pattern was observed for the second selection, $\chi^2 (1, N = 214) = 16.53$, $p < .001$. Participants in the binged condition were more likely to choose binged shows (60.78%) than were those in the week-to-week condition (33.04%). Based on these results, it seems that the list generated from the pretest was valid.

Prior to exploring hypotheses, bivariate correlations among all variables were run to examine associations between them (see Table 4). The correlations indicate significant connections between all variables that are medium to strong in magnitude. In particular, the quality of the program was found to be highly correlated with both suspense ($r = .74$, $p < .001$) and plot complexity ($r = .70$, $p < .001$). The strength of these correlations indicate that quality may not be quite distinct from either suspense or plot complexity. Thus, the regression analysis was conducted with this in mind, and both tolerance and variance inflation factors (VIF) are reported alongside regression weights.
Table 4. Zero-order Correlations Between All Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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</thead>
<tbody>
<tr>
<td>1. Plot complexity</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Character complexity</td>
<td>.52**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Suspense</td>
<td>.69**</td>
<td>.45**</td>
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<td></td>
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</tr>
<tr>
<td>4. Seriality</td>
<td>.67**</td>
<td>.51**</td>
<td>.68**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Quality</td>
<td>.70**</td>
<td>.33**</td>
<td>.74**</td>
<td>.50**</td>
<td>.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Availability</td>
<td>.57**</td>
<td>.47**</td>
<td>.59**</td>
<td>.49**</td>
<td>.57**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7. Social pressure</td>
<td>.56**</td>
<td>.42**</td>
<td>.53**</td>
<td>.44**</td>
<td>.48**</td>
<td>.40**</td>
<td>1</td>
</tr>
<tr>
<td>8. Bingeability</td>
<td>.47**</td>
<td>.37**</td>
<td>.57**</td>
<td>.53**</td>
<td>.46**</td>
<td>.44**</td>
<td>.42**</td>
</tr>
</tbody>
</table>

**p < .01

To test the hypotheses posed by H1a-e and H2a-b, a multiple regression was conducted with bingeability as the dependent variable and character complexity, plot complexity, suspense, seriality, quality, availability, and social pressure as predictors.

Due to the potential for multicollinearity, tolerance and VIF are reported (See Table 5). An examination of tolerance and VIF—particularly for quality—indicates that, while correlations between quality and other variables are high, the collinearity diagnostics do not appear to indicate severe multicollinearity. Therefore, quality was retained in the analysis.

H1a-e predicted that plot complexity, character complexity, suspense, quality, and seriality would all significantly positively predict bingeability. Standardized beta weights indicate that, while suspense and seriality significantly predicted bingeability, plot complexity,
character complexity, and quality of the program did not. Therefore, H1c and H1e are supported, while H1a, H1b, and H1d are not.

H2a proposed that readily available programs are more likely to be binged, and H2b stated that social pressure would significantly predict bingeability. The multiple regression indicated that social pressure was a significant positive predictor of bingeability. However, availability of the program was not. Therefore, while H2b is supported, H2a is not.

Table 5. Multiple Regression for Predictors of Bingeability

<table>
<thead>
<tr>
<th></th>
<th>Bingeability</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>Tolerance</td>
<td>VIF</td>
<td></td>
</tr>
<tr>
<td>Plot Complexity</td>
<td>-.05</td>
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<td>3.02</td>
<td></td>
</tr>
<tr>
<td>Character Complexity</td>
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<td>.62</td>
<td>1.60</td>
<td></td>
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<tr>
<td>Suspense</td>
<td>.27**</td>
<td>.30</td>
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<td></td>
</tr>
<tr>
<td>Seriality</td>
<td>.24**</td>
<td>.43</td>
<td>2.30</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>.04</td>
<td>.35</td>
<td>2.82</td>
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</tr>
<tr>
<td>Availability</td>
<td>.10</td>
<td>.55</td>
<td>1.81</td>
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</tr>
<tr>
<td>Social Pressure</td>
<td>.12*</td>
<td>.63</td>
<td>1.58</td>
<td></td>
</tr>
</tbody>
</table>

\[ F(7, 291) = 26.47, \text{ adjusted } R^2 = .37, p < .001 \]

\*p < .05 ** p < .01 *** p < .001.

Discussion

Study 1 was designed to examine factors that influence whether or not a show is likely to be binge watched. A number of factors—both content-related and non-content-related—were hypothesized to have an impact on bingeability. Taken together with the results of the pretest, the
results do indicate significant differences in which shows are likely to be binge watched. However, a few factors emerged as particularly important in determining whether a show is likely to be binged.

With regards to the content of the program, shows that are suspenseful and serial in nature are likely more likely to be binged than are shows that are relatively low in suspense or episodic in nature. These results lend credence to the idea that binge watching can result from narrative inertia—the show itself builds interest and uncertainty to the point that the next episode must be consumed as quickly as possible, both to further the overarching story (i.e., seriality) and to resolve uncertainty (i.e., suspense).

Additionally, social pressure was also found to be a significant predictor of bingeability. Participants in this study were more likely to binge watch programs that they believed their friends would be watching and discussing. This finding supports previous research that suggests that television viewing is a social activity (Levy, 1987) and that binge watching in particular may serve as a way to keep up with socially important television programs. Interestingly, availability of the program was not a significant predictor; individuals in the sample do not appear to be binge watching simply because they have the capability to do so; rather, they seem to be more purposive in selecting the programs they wish to binge watch.

Interestingly, when examining the shows that individuals in both conditions listed, there was overlap. In particular, participants in both conditions listed Game of Thrones and The Walking Dead as shows that they watched, whether it was week-to-week or binged. Interestingly, these two programs are the only two out of the shows listed by those in the binge condition that currently air in a week-to-week pattern. All other shows listed by those in the binge condition have either finished their original television run or have originated on a VOD service. This seems
to indicate that, when viewers watch previously aired or VOD-originated programming, they do not space them out; rather, they consume them as quickly as possible; based on these data, participants who watch week-to-week may do so because of constraints placed upon them by network television scheduling.

While this study sheds insight on why individuals binge watch certain programs, it cannot speak to the effects of binge watching on the individual. However, given that suspense appears to be the strongest predictor of binge watching, the question of how it may interact with binge watching to influence viewers arises. Both of these questions are explored in Study 2.
Chapter 4

Study 2

Methods

To explore the effects of binging and suspense on narrative engagement and narrative outcomes, a 2 (Suspense: high vs. low) X 2 (Binged: yes vs. no) factorial quasi-experiment was designed.

Participants

A total of 412 complete responses were collected. Of these, four were removed due to participants taking the questionnaire more than once. Additionally, participants who were unable to answer questions regarding the plot of the episodes they watched were removed, resulting in 80 responses being taken from the final dataset. Thus, a total of 327 participants were retained.

Participants were recruited from introductory communications classes at a large Northeastern university in the United States. A student sample was chosen specifically because this age group is most likely to frequently binge watch. Participants ranged in age from 18 to 30 years old ($M = 19.46, SD = 1.49$). They were mostly White (78.60%), followed by Asian (11.30%), Black (7.30%), and Latino (6.70%). The majority of participants were female (60.90%).

Procedure

In order to fully inform participants about the expectations of the study prior to them signing up, random assignment was not used for the binge conditions. Rather, participants were sorted into either binged or non-binged conditions based on the class from which they were

---

1 Four-hundred and eighty two participants completed the first episode and associated questions; 425 completed the second.
recruited. However, all classes were introductory level, general-education communications courses and thus were thought to be similar in student make-up. In fact, participants in the binged and non-binged conditions did not significantly differ in age, \( t(324) = -0.44, p < .66 \). Additionally, there were no significant differences detected for gender, \( \chi^2(1, N = 327) = 0.35, p = .55 \). Finally, no significant differences between the binged and non-binged conditions were found for participants who were White \( (\chi^2(1, N = 327) = .00, p = 1.00) \), Black, \( (\chi^2(1, N = 327) = 0.89, p = .35) \), Native American \( (\chi^2(1, N = 327) = 0.74, p = .39) \), Asian \( (\chi^2(1, N = 327) = 0.64, p = .42) \), Latino \( (\chi^2(1, N = 327) = 1.10, p = .29) \), or any other ethnicity\( (\chi^2(1, N = 327) = 1.75, p = .19) \). Thus, there is no reason to suspect differences based on non-random assignment.

Participants were given a link to a Qualtrics questionnaire that hosted all videos and questions. They were administered informed consent before being redirected to a page giving them instructions for the study. At this point, they were shown their first episode, after which they completed a questionnaire composed of engagement measures. Those in the binging condition then continued with the next episode, after which they again completed the same questionnaire. Finally, they watched the final episode and completed the final questionnaire, including engagement, enjoyment, appreciation, psychological well-being, and recommendation measures.

The procedure differed somewhat for those in the non-binged condition. After the first episode and questionnaire were completed, those in the non-binged condition were asked to enter an email address where they could be reached. Seven days after the link to the first episode was sent, participants were emailed the second portion of the questionnaire including the second episode and the second round of engagement measures. Seven days later, the final portion of the
questionnaire, including the last episode and engagement measures along with enjoyment, appreciation, psychological well-being, and recommendation measures.

All participants who finished all parts of the study were awarded with extra credit and a chance to win one of two $100 Amazon gift cards.

**Stimulus**

_The Night Of_ was the program selected for use in the study. This dramatic miniseries centers on the plight of Naz, a Pakistani-American college student who wakes up after a night of partying to discover the girl he was with has been repeatedly stabbed. The study utilized the first episode of the miniseries, which ran for approximately 80 minutes including opening sequence and credits.

Within the first episode, Naz is invited to a party with members of his college’s basketball team, but after his friend cancels on him, he steals his father’s cab to go to the party. On the way, he picks up a woman by the name of Andrea, and they engage in a night of alcohol, drugs, and sex. The next morning, he awakens to find that Andrea has been stabbed to death. He flees the scene in his father’s cab, but is pulled over for reckless driving and taken to the police station after the officers suspect him of driving under the influence. Once at the station, the officers find a bloody knife in Naz’s pocket and arrest him on suspicion of murder. Soon after, he meets a lawyer, who agrees to take his case. The episode ends with his family discovering he has been arrested and that the taxi has been taken.

For the purposes of the study, this episode was split into three episodes that ranged in length from 21 minutes, 13 seconds to 27 minutes, 25 seconds. The amount of time participants spent on each video was recorded; however, there were apparent discrepancies between the amount of time spent on each video and the answers on the test questions following each
episode. In particular, participants did not always watch the videos in their entirety, while many
participants spent far longer than the length of the video on the videos. Essentially, participants
varied widely in how long they spent on the video page, with some not watching the entire
videos and others staying on the page on which the video was embedded for far longer than the
length of the video. However, these participants did correctly answer the test questions. Thus,
there was a concern that there was an error in the recording mechanism, and so participants were
retained as long as they correctly answered the test questions.

Independent variables

Two variables were manipulated in this study: binge watching and suspense.

Binge watching.

Participants were assigned either to watch all three episodes in sequence or to watch it on
a week-to-week basis. Those in the binging condition were instructed to watch three episodes of
the program assigned to them in one sitting. To control for temporal effects, the binged
conditions were divided into three groups, and one group binge watched during each week of the
non-binged condition. In this manner, any potential effects of major events happening outside the
bounds of the study were minimized. Participants in the week-to-week condition were emailed
one episode of the program per week for a three-week span. They were emailed each portion of
the study at the same time and day of the week, and instructed to watch at the same day and time
of week that they had watched the first episode if possible.

Suspense.

Given that suspense is marked by a sense of uncertainty about a character’s fate, suspense
was manipulated by editing the ends of each video to either end on a cliffhanger, or to not end on
a cliffhanger. In the high-suspense condition, the videos ended as follows:
1) Naz discovers Andrea’s bloody body.

2) The police discover a bloody knife in Naz’s pocket and tackle him to the ground.

3) An unseen person picks up a ringing phone.

In the low suspense condition, the videos ended without cliffhangers:

1) Naz wakes up after a night out.

2) A police officer tells Naz that he is allowed to leave.

3) Naz’s father runs out into the street after discovering that his son has been arrested.

A pretest was run to determine whether suspense was adequately manipulated. Twenty-four participants were recruited from small communications courses (54.2% White, 54.2% female). In exchange for their participation, students received extra credit.

Prior to receiving the questionnaire, participants were given informed consent. They were then sorted randomly into either the high-suspense or low-suspense condition. They then watched three episodes in sequence that either did or did not end on cliffhangers. Following each video, they answered questions about the suspense of the program. Once all videos were watched and all questions answered, participants were rewarded with extra credit.

Suspense was measured three times—once after each video—utilizing five 7-point, Likert-type (i.e., 1 = Strongly Disagree and 7 = Strongly Agree) items adapted from Knobloch, Patzig, Mende, and Hastall (2004). Sample items include “This episode gripped me” and “I found this episode exciting.” The scale created for the first episode proved to be reliable, Cronbach’s alpha = .81, as did the index for the second episode, Cronbach’s alpha = .86, and the third episode, Cronbach’s alpha = .89.

Since episodes were temporally ordered and measured within-subjects, a repeated measures ANOVA was employed with a multivariate approach. There were no multivariate main
effects of suspense detected, Wilks’ Λ = .83, $F(2, 21) = 2.10$, $p = .15$, partial $\eta^2 = .17$. However, there was a significant interaction effect between condition and suspense, Wilks’ Λ = .71, $F(2, 21) = 4.27$, $p < .05$, partial $\eta^2 = .29$. The univariate main effect of condition approached significance, $F(1,22) = 3.57$, $p < .10$, partial $\eta^2 = .14$. Overall, those in the high suspense condition reported higher levels of suspense ($M = 5.47$, $SE = .23$) than did those in the low suspense condition ($M = 4.89$, $SE = .21$). An examination of the interaction effect indicates that this main effect is largely driven by the second episode, as shown in Table 6. The results indicate that, while means were higher in the high suspense condition than the low suspense in all cases, this difference was only significant after the second episode. Given that means for suspense were trending in the proper direction and the sample size was quite small, the decision was made to retain the manipulation, but run a manipulation check in the overall study.

Table 6. Perceptions of Suspense by Episode for Suspense Manipulation

<table>
<thead>
<tr>
<th></th>
<th>High Suspense</th>
<th>Low Suspense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ep. 1</td>
<td>5.16&lt;sub&gt;Aa&lt;/sub&gt;</td>
<td>4.77&lt;sub&gt;Aa&lt;/sub&gt;</td>
</tr>
<tr>
<td>Ep. 2</td>
<td>5.82&lt;sub&gt;Aa&lt;/sub&gt;</td>
<td>4.66&lt;sub&gt;Ab&lt;/sub&gt;</td>
</tr>
<tr>
<td>Ep. 3</td>
<td>5.42&lt;sub&gt;Aa&lt;/sub&gt;</td>
<td>5.24&lt;sub&gt;Aa&lt;/sub&gt;</td>
</tr>
</tbody>
</table>

Means not sharing a lower-case subscript differ significantly at $p < .05$ across the row. Means not sharing a capital subscript differ significantly along the column.

**Measures**

All variables were measured utilizing 7-point, Likert-type scales ranging from 1 “strongly disagree” to 7 “strongly agree.” Engagement measures, along with anticipation, and suspense, were each measured once per episode for a total of three times, while outcome measures (e.g.,
enjoyment, appreciation, psychological well-being, and recommendation) were measured once after viewing for all three episodes was completed. All items are included in the Appendix.

**Transportation.**

Transportation was measured using four items adapted from the Transportation Scale—Short Form (Appel, Gnambs, Richter, & Green, 2015). Two items were not utilized due to the adaptation of the scale from print to television. Items included “I could picture myself in the events of the narrative” and “The program affected me emotionally”. One item was dropped from the scale due to low reliability, resulting in Cronbach’s alphas of .70, .70, and .76.

**Identification.**

Identification was measured using eight items (Cohen, 2001), including “I tend to understand the reasons why Naz does what he does.” and “While viewing the show, I could feel the emotions Naz portrayed.” Across the three time points, identification was found to be reliable ($\alpha_1 = .86$, $\alpha_2 = .87$ $\alpha_3 = .88$).

**Parasocial interaction.**

PSI was measured by utilizing the PSI-Process Scales (Schramm & Hartmann, 2008). Items included “Occasionally, I wondered whether Naz was similar to me or not” and “Occasionally, I said something to Naz on impulse.” PSI was found to be reliable, Cronbach’s alpha = .67, .74, .74.

**Anticipation.**

Anticipation was measured using a single item created specifically for this study: “I look forward to watching more of this show.”
**Suspense.**

Suspense was measured utilizing three items adapted from Oliver and Bartsch (2010). Items included “This was a heart-pounding kind of show” and “The episode was suspenseful.” Cronbach’s alpha at each timepoint (i.e., $\alpha_1 = .86$, $\alpha_2 = .87$, $\alpha_3 = .90$) indicate that the scale was reliable.

**Enjoyment and appreciation.**

Enjoyment and appreciation were measured using six items adapted from Oliver and Bartsch (2010). Items for enjoyment included “It was fun for me to watch this television show,” “I had a good time watching this program,” and “The show was entertaining” while appreciation items included “The show was thought-provoking,” “I was moved by this TV show,” and “I found this show to be very meaningful” (Enjoyment $\alpha = .93$, appreciation $\alpha = .91$).

**Psychological well-being.**

Psychological well-being was measured using the Warwick-Edinburgh Mental Well-being Scale developed by Tennant and colleagues (2007). The scale consisted of 13 items including, “I’ve been feeling optimistic about the future” and “I’ve been feeling good about myself.” The scale was reliable with a Cronbach’s alpha of .95.

**Likelihood to recommend.**

Likelihood to recommend was measured by using eight items from Moldovan, Goldenberg, and Chattopadhyay (2011) and three items from Heath, Bell, and Sternberg (2001). All items were adapted into a television context and combined to form a single, reliable index ($\alpha = .87$).

Additionally, eight items were created for the study to determine how individuals were likely to share information about the show. Participants were asked on a 7-point, Likert-type
scale with 1 indicating “extremely unlikely” and 7 indicating “extremely likely” how likely they were to discuss the show via Facebook, Twitter, Instagram, Snapchat, face-to-face conversation, text message, email, or phone call. Because a participant’s response on one item does not necessarily predict their answer on another, these items were not combined into a single scale.

**Results**

**Manipulation Check**

Because the suspense manipulation relied entirely on the participants watching the cliffhangers (or lack thereof) in each video, participants who did not watch all three videos in their entirety were filtered out. This resulted in in a total $N$ of 164. To explore the effectiveness of the suspense manipulation, a similar procedure to the pretest was carried out, with a repeated measures ANOVA with a multivariate approach employed.

An examination of the multivariate effects indicates that there was a significant main effects of episode on suspense, Wilks’ $\Lambda = .78$, $F(2, 161) = 23.07$, $p < .001$, partial $\eta^2 = .22$. Overall, the second episode of the sequence showed to be significantly more suspenseful ($M = 5.31$, $SE = .11$) than either the first ($M = 4.82$, $SE = .11$) or third episodes ($M = 4.87$, $SE = .12$). The first and third episodes did not differ significantly in suspense.

There was also a significant multivariate interaction, Wilks’ $\Lambda = .92$, $F(2, 161) = 6.80$, $p < .01$, partial $\eta^2 = .08$. For the second episode, those in the high suspense condition found the episode to be significantly more suspenseful ($M = 5.53$, $SE = .14$) than those in the low suspense condition ($M = 5.10$, $SE = .14$). However, there were no significant differences found between high- and low-suspense conditions on either episode 1 or episode 3. The univariate test indicated that the effect of condition on overall suspense was not significant, $F(1, 162) = 0.77$, $p = .38$, partial $\eta^2 = .01$. While high suspense conditions were rated to be higher in overall suspense than
low-suspense conditions, this difference was not significant. These results indicate a failure of
the manipulation. Thus, suspense was dropped as an IV, and, given that viewing of the entire
episode was only necessary for the suspense manipulation, excluded participants were added
back into the sample. Due to this, H6 and RQ1 could not be examined.

**Hypothesis Testing**

H4 stated that engagement would be higher over time for participants binging content
than for those not binging. To examine this hypothesis, a series of repeated measures ANOVAs
were conducted with binging as the between-subjects variable and episode as the within-subjects
variable.

**Transportation.**

A repeated measures ANOVA with episode as the within-subjects variable and binging as
the between-subjects variable revealed no significant main effect for transportation, Wilks’ $\Lambda = .98$, $F(2, 324) = 1.90, p = .15$, partial $\eta^2 = .01$. Transportation did not appear to significantly
change over time. Neither was there a significant interaction effect, Wilks’ $\Lambda = .99$, $F(2, 324) =
1.56, p = .21$, partial $\eta^2 = .01$.

**Identification.**

The repeated measures ANOVA revealed a significant multivariate main effect of episode on
identification, Wilks’ $\Lambda = .96$, $F(2, 324) = 7.70, p < .05$, partial $\eta^2 = .05$. Pairwise comparisons
utilizing Holms sequential Bonferroni post-hoc analysis indicate that the second episode ($M =
4.10, SE = .07$) was significantly lower in identification than either episode one ($M = 4.25, SE =
.06$) or episode three ($M = 4.24, SE = .07$). However, identification was not significantly
different between the first and third episodes.
A multivariate analysis did not detect a significant interaction on identification, Wilks’ \( \Lambda = .97, F(2, 324) = 4.95, p < .01 \), partial \( \eta^2 = .03 \).

**PSI.**

There was a significant multivariate main effect of episode on PSI, Wilks’ \( \Lambda = .99, F(2, 324) = 1.56, p = .21 \), partial \( \eta^2 = .01 \). According to pairwise comparisons with Holm’s sequential Bonferroni post-hocs, the third episode (\( M = 4.00, SE = .05 \)) was significantly higher in PSI than the second (\( M = 3.90, SE = .05 \)). However, neither the second nor the third episode was significantly different from the first in PSI.

There was also a multivariate interaction between binge watching and episode, Wilks’ \( \Lambda = .95, F(2, 324) = 8.08, p < .001 \), partial \( \eta^2 = .05 \). As shown in Table 7, participants in the non-binged condition experienced greater levels of PSI as time went on, such that participants experienced highest PSI in the third episode. However, there was no such difference over time for the binged condition.

<table>
<thead>
<tr>
<th></th>
<th>Binged</th>
<th>Non-Binged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ep. 1</td>
<td>4.01\textsubscript{Aa}</td>
<td>3.87\textsubscript{Aa}</td>
</tr>
<tr>
<td>Ep. 2</td>
<td>3.99\textsubscript{Aa}</td>
<td>3.82\textsubscript{Aa}</td>
</tr>
<tr>
<td>Ep. 3</td>
<td>3.97\textsubscript{Aa}</td>
<td>4.04\textsubscript{Ba}</td>
</tr>
</tbody>
</table>

Means not sharing a lower-case subscript differ significantly at \( p < .05 \) across the row. Means not sharing a capital subscript differ significantly along the column.
In sum, H4 predicted that engagement would be higher over time for the binged condition than for the non-binged condition; this pattern was not observed, and, in the case of PSI, the opposite pattern occurred. Thus, H4 is not supported.

**Anticipation.**

H5 predicted that anticipation would be higher for those in the non-binged condition than in the binged condition. A repeated measures ANOVA utilizing binging as the between-subjects variable and episode as the within-subjects variable—and the test of between-subjects effects in particular—was examined. The results of this test revealed that overall anticipation was indeed higher for those in the non-binged condition ($M = 5.09$, $SE = .11$) than for those in the binged condition, ($M = 4.43$, $SE = .13$, $F(1, 325) = 14.27$, $p < .001$, partial $\eta^2 = .04$). Thus, H5 is supported.

Additionally, the results of the analysis indicated a significant multivariate main effect of episode on anticipation, Wilks’ $\Lambda = .92$, $F(2, 324) = 13.83$, $p < .001$, partial $\eta^2 = .08$. The second ($M = 4.84$, $SE = .10$) and third episodes ($M = 4.96$, $SE = .10$) produced significantly more anticipation than did the first episode ($M = 4.48$, $SE = .10$), although the second and third episodes did not differ significantly in anticipation.

There was no significant multivariate interaction detected, Wilks’ $\Lambda = 1.00$, $F(2, 324) = 0.63$, $p = .53$, partial $\eta^2 = .00$.

**Binge-watching and enjoyment and appreciation.**

RQ2a and RQ2b inquired about the relationship between binging and both enjoyment and appreciation. To examine these relationships, independent samples t-tests were conducted with binging as the grouping variable and enjoyment and appreciation as dependent variables. The results indicated a significant difference for enjoyment, $t(325) = 3.76$, $p < .001$. Participants who
binge watched the program ($M = 4.62$, $SE = .11$) enjoyed it significantly less than did those who did not binge ($M = 4.62$, $SE = .14$).

Additionally, there was a significant difference found for appreciation, $t(325) = 2.10, p < .05$. Participants who did not binge watch the show ($M = 4.80$, $SE = .11$) appreciated it significantly more than did those who binged ($M = 4.43$, $SE = .14$).

**Psychological well-being.**

RQ3 asked what the relationship between binge watching and psychological well-being would be. To address this question, an independent samples t-test was conducted with binge watching as the IV and psychological well-being as the DV. The results indicated no significant difference between binging and not binging, $t(325) = 0.37, p = .72$.

**Likelihood to recommend.**

H7 predicted that both enjoyment and appreciation would be positively associated with likelihood to recommend the program. A multiple regression analysis was conducted with enjoyment and appreciation. The model explained a significant portion of the variance, $F(2,324) = 270.93$, adjusted $R^2 = .63$, $p < .001$. As shown in Table 8, both appreciation and enjoyment positively predicted likelihood to recommend; thus H7 is supported.

<table>
<thead>
<tr>
<th>Table 8. Predictors of Likelihood to Recommend</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\beta$</td>
</tr>
<tr>
<td>Enjoyment</td>
</tr>
<tr>
<td>.28***</td>
</tr>
<tr>
<td>Appreciation</td>
</tr>
<tr>
<td>.56***</td>
</tr>
<tr>
<td>$F(2,324) = 270.93$, adjusted $R^2 = .63$, $p &lt; .001$</td>
</tr>
</tbody>
</table>
The effect of binge watching on likelihood to recommend was also explored, utilizing an independent sample t-test. The results of this analysis indicate that participants were more likely to recommend the show if they had not binge watched \((M = 3.98, SE = .08)\) than if they did \((M = 3.71, SE = .10, t(325) = 2.17, p < .05)\).

Additionally, the effect of binge watching on method of recommendation was also examined. A multiple ANOVA was conducted. The univariate effects, as reported in Table 9, indicate that there were significant differences between conditions on likelihood to recommend via Twitter, \(F(1, 324) = 6.46, p < .05, \text{partial } \eta^2 = .02\), text message, \(F(1, 324) = 5.18, p < .05, \text{partial } \eta^2 = .02\), and phone call, \(F(1, 324) = 4.54, p < .05, \text{partial } \eta^2 = .01\). Further, the differences in likelihood to recommend via face-to-face conversation approached significance, \(F(1, 324) = 3.40, p < .10, \text{partial } \eta^2 = .01\). Participants who binge watched were less likely than those who did not binge watch to recommend via Twitter, text message, phone call, and face-to-face conversation.

However, it must be noted that the means for these recommendation methods were relatively low (i.e., less than the midpoint of the scale).
Table 9. Means and Standard Deviations for Method of Recommendation

<table>
<thead>
<tr>
<th>Method of Recommendation</th>
<th>Binged M (SD)</th>
<th>Non-Binged M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>1.75 (1.52)</td>
<td>1.98 (1.54)</td>
</tr>
<tr>
<td>Twitter*</td>
<td>2.26 (1.74)</td>
<td>1.78 (1.59)</td>
</tr>
<tr>
<td>Instagram</td>
<td>1.56 (1.34)</td>
<td>1.80 (1.33)</td>
</tr>
<tr>
<td>Snapchat</td>
<td>2.29 (1.90)</td>
<td>2.59 (1.85)</td>
</tr>
<tr>
<td>Face-to-face+</td>
<td>4.43 (2.05)</td>
<td>4.82 (1.76)</td>
</tr>
<tr>
<td>Text message*</td>
<td>3.42 (2.00)</td>
<td>3.94 (2.08)</td>
</tr>
<tr>
<td>Email</td>
<td>1.54 (1.34)</td>
<td>1.61 (1.21)</td>
</tr>
<tr>
<td>Phone call*</td>
<td>2.55 (1.91)</td>
<td>3.03 (2.09)</td>
</tr>
</tbody>
</table>

+p < .10, *p < .05.

Further Exploratory Analyses

The results of the study indicate that binge watching has a negative impact on anticipation, enjoyment, appreciation, and recommendation, such that those who binge watched expressed less anticipation, enjoyment, appreciation, and likelihood to recommend. Additionally, PSI was affected such that PSI increased over time for those who did not binge watch, while this same pattern did not occur for those who binge watched.

To further explore the effects of binge watching on these variables, first bivariate correlations were run (see Table 10). Overall measures for PSI (α = .86) and anticipation (α = .85) were created, and then all the variables of interest were included in the analysis. The results of this analysis indicate that enjoyment, appreciation, anticipation, and likelihood to recommend are all very highly correlated with one another (r > .75, p < .01), indicating that these items may
indeed be measuring the same concept. Thus, an exploratory factor analysis was conducted using principle axis factoring extraction and a promax rotation and including all enjoyment and appreciation items, as well as the overall index of anticipation and items from the likelihood to recommend scale. As shown in Table 11, the results of this analysis extracted three factors with an Eigenvalue above 1, explaining 75.18% of the total variance. Two of the items in question, while loading on their own factor, appeared to do so based only on the negative wording of the items; thus, these two items were dropped and the analysis was rerun.

The second iteration of the factor analysis extracted 2 factors with Eigenvalues above 1, explaining 74.45% if the total variance. Upon examination of the pattern matrix, two items appeared to cross-load and were eliminated (See Table 12). The analysis was re-run again. The resultant analysis extracted two factors with Eigenvalues greater than 1, explaining 73.98% of the variance. The pattern matrix indicated good simple structure, and thus two factors were created: positive appraisal (10 items, α = .96) and intention to recommend (4 items, α = .89, See Table 13).

Table 10. Bivariate Correlations

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PSI</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Anticipation</td>
<td>.58**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Likelihood to Recommend</td>
<td>.57**</td>
<td>.69**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Enjoyment</td>
<td>.49**</td>
<td>.80**</td>
<td>.71**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. Appreciation</td>
<td>.64**</td>
<td>.76**</td>
<td>.77**</td>
<td>.77**</td>
<td>1</td>
</tr>
</tbody>
</table>

**p < .01
Table 11. Factor Analysis 1 Pattern Matrix

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>The show was entertaining.</td>
<td>1.027</td>
<td>-.185</td>
<td>-.022</td>
</tr>
<tr>
<td>It was fun for me to watch this show.</td>
<td>.959</td>
<td>-.131</td>
<td>-.011</td>
</tr>
<tr>
<td>I had a good time watching this program.</td>
<td>.951</td>
<td>-.115</td>
<td>.054</td>
</tr>
<tr>
<td>The show was thought-provoking.</td>
<td>.847</td>
<td>.018</td>
<td>-.119</td>
</tr>
<tr>
<td>Anticipation</td>
<td>.749</td>
<td>.065</td>
<td>.090</td>
</tr>
<tr>
<td>I was moved by this TV show.</td>
<td>.709</td>
<td>.239</td>
<td>-.109</td>
</tr>
<tr>
<td>I found this show to be very meaningful.</td>
<td>.670</td>
<td>.268</td>
<td>-.104</td>
</tr>
<tr>
<td>I have good things to say about the show</td>
<td>.655</td>
<td>.222</td>
<td>.073</td>
</tr>
<tr>
<td>I would pass this show along as an interesting story</td>
<td>.562</td>
<td>.281</td>
<td>-.018</td>
</tr>
<tr>
<td>I would pass this show along if somebody else talked about something similar</td>
<td>.539</td>
<td>.201</td>
<td>.033</td>
</tr>
<tr>
<td>I intend to provide as many details as I can about the show to others</td>
<td>-.110</td>
<td>.891</td>
<td>-.087</td>
</tr>
<tr>
<td>I intend to talk about this show on every possible occasion</td>
<td>-.124</td>
<td>.873</td>
<td>-.153</td>
</tr>
<tr>
<td>I intend to talk about this show</td>
<td>.106</td>
<td>.813</td>
<td>.021</td>
</tr>
<tr>
<td>I intend to tell my friends about this show</td>
<td>.125</td>
<td>.770</td>
<td>.016</td>
</tr>
<tr>
<td>I will recommend my friends to watch this show</td>
<td>.239</td>
<td>.610</td>
<td>.191</td>
</tr>
<tr>
<td>I would pass along this show to others</td>
<td>.324</td>
<td>.538</td>
<td>.158</td>
</tr>
<tr>
<td>I have bad things to say about the show</td>
<td>.022</td>
<td>.005</td>
<td>-.799</td>
</tr>
<tr>
<td>I will recommend my friends not to watch the show</td>
<td>.055</td>
<td>.154</td>
<td>-.754</td>
</tr>
</tbody>
</table>

<p>| Eigenvalue | 10.85 | 1.63 | 1.06 |
| Proportion of Variance (%) | 60.25 | 9.04 | 5.89 |</p>
<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>The show was entertaining.</td>
<td>1.013</td>
<td>-.188</td>
</tr>
<tr>
<td>I had a good time watching this program.</td>
<td>1.007</td>
<td>-.145</td>
</tr>
<tr>
<td>It was fun for me to watch this show.</td>
<td>.966</td>
<td>-.147</td>
</tr>
<tr>
<td>Anticipation</td>
<td>.814</td>
<td>.047</td>
</tr>
<tr>
<td>The show was thought-provoking.</td>
<td>.750</td>
<td>.045</td>
</tr>
<tr>
<td>I have good things to say about the show</td>
<td>.722</td>
<td>.196</td>
</tr>
<tr>
<td>I was moved by this TV show.</td>
<td>.622</td>
<td>.264</td>
</tr>
<tr>
<td>I found this show to be very meaningful.</td>
<td>.585</td>
<td>.296</td>
</tr>
<tr>
<td>I would pass this show along if somebody else talked about something similar</td>
<td>.582</td>
<td>.176</td>
</tr>
<tr>
<td>I would pass this show along as an interesting story</td>
<td>.571</td>
<td>.263</td>
</tr>
<tr>
<td>I intend to provide as many details as I can about the show to others</td>
<td>-.165</td>
<td>.907</td>
</tr>
<tr>
<td>I intend to talk about this show on every possible occasion</td>
<td>-.196</td>
<td>.866</td>
</tr>
<tr>
<td>I intend to talk about this show</td>
<td>.159</td>
<td>.778</td>
</tr>
<tr>
<td>I intend to tell my friends about this show</td>
<td>.173</td>
<td>.737</td>
</tr>
<tr>
<td>I will recommend my friends to watch this show</td>
<td>.402</td>
<td>.553</td>
</tr>
<tr>
<td>I would pass along this show to others</td>
<td>.471</td>
<td>.478</td>
</tr>
<tr>
<td><strong>Eigenvalue</strong></td>
<td>10.67</td>
<td>1.06</td>
</tr>
<tr>
<td><strong>Proportion of Variance (%)</strong></td>
<td>66.70</td>
<td>6.60</td>
</tr>
</tbody>
</table>
### Table 13. Factor Analysis 3 Pattern Matrix

<table>
<thead>
<tr>
<th>Item</th>
<th>Positive Appraisal</th>
<th>Intent to Recommend</th>
</tr>
</thead>
<tbody>
<tr>
<td>I had a good time watching this program.</td>
<td>.995</td>
<td>-.137</td>
</tr>
<tr>
<td>The show was entertaining.</td>
<td>.993</td>
<td>-.161</td>
</tr>
<tr>
<td>It was fun for me to watch this show.</td>
<td>.949</td>
<td>-.132</td>
</tr>
<tr>
<td>Anticipation</td>
<td>.816</td>
<td>.047</td>
</tr>
<tr>
<td>The show was thought-provoking.</td>
<td>.742</td>
<td>.065</td>
</tr>
<tr>
<td>I have good things to say about the show.</td>
<td>.738</td>
<td>.178</td>
</tr>
<tr>
<td>I was moved by this TV show.</td>
<td>.626</td>
<td>.277</td>
</tr>
<tr>
<td>I would pass this show along if somebody else talked about something similar.</td>
<td>.599</td>
<td>.154</td>
</tr>
<tr>
<td>I would pass this show along as an interesting story.</td>
<td>.593</td>
<td>.238</td>
</tr>
<tr>
<td>I found this show to be very meaningful.</td>
<td>.592</td>
<td>.304</td>
</tr>
<tr>
<td>I intend to provide as many details as I can about the show to others.</td>
<td>-.125</td>
<td>.893</td>
</tr>
<tr>
<td>I intend to talk about this show on every possible occasion.</td>
<td>-.152</td>
<td>.845</td>
</tr>
<tr>
<td>I intend to talk about this show</td>
<td>.226</td>
<td>.717</td>
</tr>
<tr>
<td>I intend to tell my friends about this show.</td>
<td>.236</td>
<td>.681</td>
</tr>
</tbody>
</table>

| Eigenvalue | 9.08 | 1.28 |
| Proportion of Variance (%) | 1.28 | 9.12 |
Path Model

Given that intent to recommend represents a behavioral intention, it was thought that it may be influenced by a participant’s positive appraisals toward the show. Further, given that PSI deepened for those who did not binge, but did not for those who did, these differences may have driven the changes in positive appraisals. Thus, a path model was compiled utilizing single-item indicators to correct for measurement error. The model, shown in Figure 2, explored the paths from binge watching to intent to recommend, through PSI and positive appraisals. Because research into behavior indicates that attitudes can be predictive of behavioral intention (see Glasman & Albarracin, 2006), intent to recommend was positioned after positive appraisal in the model.

The model displayed good model fit, \( \chi^2 = 3.64, \text{df} = 2, r = .16, \text{RMSEA} = .05 \) (90% CI: .00-.13, CFI = 1.00, SRMR = .01, though it must be mentioned that the model was close to saturation. There were significant indirect effects found for the path from binge watching to positive appraisals to intent to recommend, \( \beta = -.59, p < .001 \). However, the path from binge watching to PSI to positive appraisals to intent to recommend was not significant, \( \beta = .10, p = .35 \). A closer examination indicates that, while PSI does positively predict positive appraisal, which does positively predict intent, binge watching does not have a significant effect on PSI, hence the non-significance of this indirect effects.
Predicting attrition.

Given that the results found contradict the hypotheses in many ways, questions arise as to why this happened. One possible explanation is that participants experienced binge fatigue and thus expressed less favorable attitudes toward the show. One way to test this is to examine those who dropped out of the experiment to determine if those who binged left the experiment for different reasons than those who did not binge.

To explore this, a series of logistic regressions were conducted utilizing transportation, identification, PSI, suspense, and anticipation as predictor variables and completion of the next
episode as the dependent variable. Binging was used as a selection variable. As shown in Table 14, participants in the binging conditions were more likely to watch the second episode if they expressed higher anticipation, while they were less likely to watch the second episode if they experienced a lot of suspense. However, these factors were not significant for those in the non-binged condition.

In terms of the third episode, there were no differences detected for those in the non-binged condition. Additionally, the logistic regression could not be run for those in the binged condition, because everyone in the binged condition who completed the second episode also completed the third (See Table 15).

### Table 14. Predicting Likelihood to Watch Second Episode

<table>
<thead>
<tr>
<th>Variable (Ep. 1)</th>
<th>Non-Binged</th>
<th>Binged</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Wald X²</td>
</tr>
<tr>
<td>Transportation</td>
<td>-.04</td>
<td>.04</td>
</tr>
<tr>
<td>Identification</td>
<td>.16</td>
<td>.58</td>
</tr>
<tr>
<td>PSI</td>
<td>.02</td>
<td>.00</td>
</tr>
<tr>
<td>Suspense</td>
<td>.04</td>
<td>.10</td>
</tr>
<tr>
<td>Anticipation</td>
<td>.06</td>
<td>.34</td>
</tr>
</tbody>
</table>

Watching the second episode was coded as 0 = did not watch and 1 = watched.

+\( p < .10 \). *\( p < .05 \).
Table 15. Predicting Likelihood to Watch Third Episode for Non-Binged Condition

<table>
<thead>
<tr>
<th>Variable (Ep. 2)</th>
<th>B</th>
<th>Wald X²</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>-.10</td>
<td>.11</td>
<td>.90</td>
</tr>
<tr>
<td>Identification</td>
<td>.06</td>
<td>.03</td>
<td>1.06</td>
</tr>
<tr>
<td>PSI</td>
<td>.10</td>
<td>.06</td>
<td>1.12</td>
</tr>
<tr>
<td>Suspense</td>
<td>.24</td>
<td>.88</td>
<td>1.28</td>
</tr>
<tr>
<td>Anticipation</td>
<td>-.21</td>
<td>1.06</td>
<td>.81</td>
</tr>
</tbody>
</table>

Watching the third episode was coded as 0 = did not watch and 1 = watched.

Results Summary

In sum, binge watching—contrary to expectations—appeared to have a negative impact on PSI, positive appraisals, and intention to recommend. Binge watching did not appear to have an impact on transportation, identification—though identification did change overtime regardless of binging behavior—or psychological well-being. Additionally, results of the path analysis indicate significant negative indirect effects of binge watching on intention to recommend through positive appraisals, though not through PSI. Finally, participants who binged based their decision on whether or not to continue watching largely on content-related features, while those who did not binged utilized other factors not examined here.

Discussion

The goal of this study was to determine the effects of binge watching and suspense on engagement and narrative outcomes. While suspense could not be examined due to a failure of the manipulation, binge watching proved to affect both engagement and outcome measures.
Binge watching was found to negatively impact enjoyment, appreciation, and likelihood to recommend. Individuals who binge watched the stimulus reported less enjoyment, appreciation, and recommendation intention. In particular, the finding related to recommendation is—upon first glance—puzzling, given that, according to the findings of Study 1, shows that others are watching are those that are more likely to be binged in the first place. It is possible that an explanation for these findings may lie in the results related to positive appraisals. In particular, binge watching decreased the likelihood that participants reported positive attitudes toward the show, which in turn led to a decrease in a likelihood to recommend.

For those who binge watched the program, PSI stayed relatively static. However, those in the non-binged condition saw PSI increase in the last episode. This finding indicates that time away from the program may give the viewer the chance to consider the character more fully, allowing the relationship between viewer and character to deepen to a greater degree than if they had no time between episodes to for the relationship to develop. Additionally, PSI was predictive of both appreciation and likelihood to recommend. It seems that connection with the character in this manner was indicative of how meaningful participants found the program to be. However, the path analysis indicated that the direct path from binge watching to PSI was not significant, thus binge watching did not seem to have an impact on overall feelings of parasocial connection with Naz.

Additionally, anticipation overall was higher for those in the non-binged condition, consistent with the hypothesis. Anticipation appears to require time away from the stimulus in order to build, meaning that those in the binged condition may not have the time to think about the show and build anticipation. Thus, it seems that anticipation may serve as an mechanism by which binge watching may decrease positive appraisals of the show; however, given that
anticipation was found to be highly correlated with other items of positive appraisal, tests into
the role of anticipation in changing appraisals were not possible to conduct.
Chapter 5

General Discussion

Binge watching is a popular behavior, and appears to likely to continue, especially as more people remove cable and use only VOD services for their television programing. As such, the goal of this dissertation was to explore what types of shows might be more likely to be binged, as well as examining the effects binge watching may have on viewers.

A working definition of binge watching was generated from the pretest, and the most important aspect of binge watching appears to be the sequential nature; while many previous definitions of binge watching articulate a specific number of episodes required before a session becomes a binge, the definition derived here allows for more flexibility for participants to define a binge as they see fit. As long as episodes are being watched in sequence at a single point in time, the viewing session becomes a binge.

Both the pretest and Study 1 show that certain types of shows are more likely than others to be binged. In particular, results of the pretest indicated genre differences in binging, such that dramas, thrillers, and mysteries were more likely to be listed as a binged show than a non-binged show. In contrast, reality television programs were more likely to be listed among non-binged shows than binged. These findings were bolstered by Study 1, which showed distinctions in binged and non-binged programs based on suspense and seriality. Participants reported being more likely to binge programs that were high in uncertainty and likely to have overarching stories, qualities that dramas, mysteries, and thrillers are likely to possess.

Further, outside social pressures were also predictive of a show’s bingeability. That is, a viewer is more likely to binge watch a show that they know others have seen. This offers support
for the idea that individuals may be subject to fear of missing out, and want to avoid being “out of the loop.”

Interestingly, however, even though shows were more bingeable when others are discussing it, participants who actually binged a show were less likely to recommend it to others. This finding is likely due to participants who binge watched the programming reporting less positive appraisals of the show. Those who binge watched did not seem to like the show as much, and were thus less likely to pass on recommendations to others.

There were no differences between those who binge watched and those who did not for either transportation or identification. The method by which individuals watched did not seem to have as much influence over these variables as the content itself did. However, there were differences found for PSI. In particular, individuals who binge watched the show did not exhibit changes in PSI; however, those who watched the show on a week-to-week basis showed increases in PSI, such that they felt closer to the main character, Naz, after the last episode than at other points. This pattern is largely how PSI is theorized to function; repeated exposure to a character deepens interaction until a relationship forms. However, given that the results only show this pattern to be true for those who did not binge watch indicates that time between exposures might also be a key factor of PSI not previously considered. Those in the binge watching condition were exposed to Naz for the exact same amount of time; however, they had no time between viewings to think about Naz, to try and understand him or consider if they knew others similar to him. In contrast, those who watched on a weekly basis presumably had time to discuss him with others, or to compare him to other characters they may have seen in different shows. This finding indicates that time apart from the character may play an important role in building a connection.
Interestingly, this pattern did not hold true for identification. Identification changed over time regardless of viewing method. In particular, identification was higher after the first and third episodes, with a dip after the second episode. Given that identification is marked by a close social distance between viewer and character, it seems that it may be highly dependent on the content, more so than the method of viewing. If this reasoning is correct, the viewer may only internalize the thoughts and feelings of the protagonist while the story unfolds, and they fully disengage once the show ends.

There were no differences observed for transportation either over time or due to binge watching. Part of the explanation for this likely lies within the measure itself; the transportation measure was designed for written stories, and many of the items imply a written narrative, which necessitates more imagination on the part of the reader than does a visual narrative. However, it may also be true that connection with the story world is established early on and thus does not change much, especially in a story that takes place in a real-world setting like *The Night Of* does.

Additionally, anticipation was lower for those who binge watched than for those who watched from week-to-week. This finding is consistent with previous research, which states that anticipation occurs when a viewer has time to expect and evaluate coming events (Wulff, 1996). Thus, time appears to be a necessary component for anticipation.

It is important to note, however, that anticipation was highly correlated with both enjoyment and appreciation, and even—to a degree—with likelihood to recommend. It seems that, for this type of program—a serialized, suspenseful drama—anticipation may be a necessary component of enjoyment and appreciation. Further, viewers of this program don’t appear likely to make a meaningful distinction between enjoyment and appreciation; participants found the
show to be equally pleasurable and meaningful, which caused the measures to load together in a factor analysis.

Interestingly, the method by which participants claimed they would recommend also differed by binge watching for Twitter, text message, phone call, and face-to-face conversation, such that individuals were more likely to recommend the show via Twitter, text message, phone call, or face-to-face conversation if they had not binge watched the show. Interestingly, however, participants did not report being especially likely to recommend via any of these platforms except face-to-face conversation. It seems that, in the case of the present study, the water cooler does not appear to have moved online; rather, individuals still want to discuss entertainment interpersonally.

The results of the path analysis indicate that much of the reason that intention to recommend was lower for those who binge watched the program was that positive appraisals were lowered by binge watching. This indirect path is consistent with previous work into behavioral intention, which states that attitudes can lead to changes in behavioral intention (Sheppard, Hartwick, & Warshaw, 1988).

Some insight into possible reasons why the given results were found may come from the results of the logistic regression. These results indicate that participants may utilize different criteria for deciding whether or not to continue with a television program based on the method by which they watch. Particularly important seems to be the transition from the first episode to the second; for those who binged, anticipation and suspense were important in determining whether they would continue with the show, while these factors were not predictive for non-binged conditions. However, once two episodes had been watched, it seems that inertia of a sort takes over, as participants who binged continued watching no matter what—a pattern that was not
observed for non-binged participants. While these findings cannot definitively point to the reason why non-binged participants seemed to enjoy the program more, they do suggest that those who binge for at least a couple of episodes may do so regardless of their feelings toward the show, and more so because they are already caught in a binge.

While the results of this dissertation have given interesting insights into the nature of binge watching, there are also questions raised. First, participants in Study 2—unlike those in the pretest and Study 1—were not given a choice of the show they watched. This choice was made in order to preserve experimental control, but the show chosen was highly serialized, dramatic, and suspenseful—the type of show participants in Study 1 reported being more likely to binge. However, participants who binge watched the show displayed less positive appraisals. It could be that the shows that people choose to binge are not necessarily the ones they enjoy the most; however, it could also be that taking the choice away from participants may have caused some level of resentment, or reactance against the show, particularly if it was not the type of show they would have initially chosen.

Additionally, there are questions regarding individual differences. Individual difference measures were not collected here, partially because they were not the focus of the study, but also to reduce the amount of time participants would need to spend on the study. However, it is true that different people chose to watch different programs for different reasons; thus, it stands to reason that individuals would have different reactions to binge watching based on individual traits that were not measured. Both choice and preexisting traits are interesting avenues for future research into binge watching.

The role of suspense in narrative engagement must also be discussed; in the present study, while suspense was manipulated, the manipulation was not found to be successful in the
final study. This is likely due, at least in part, to the manipulation itself; cliffhangers were used to manipulate suspense, but the manipulation could likely have been strengthened by utilizing other suspense cues, such as tense music. However, the failure of the manipulation also raises question about the nature of suspense and binge watching; in particular, how binge watching may interact with the content to change an individual’s perception of suspense. Indeed, an analysis did reveal differences between perceptions of suspense based on binge watching that bordered on significance; those who did not binge watch the show found it to be more suspenseful. Thus, it seems that more work must be done to disentangle suspense due to the show’s content from suspense due to the method of viewing.

**Theoretical Implications**

**Binge Watching**

Given that binge-watching literature is still relatively sparse, the present study has a number of implications that can help to begin building theory in this area. First, a conceptual definition of binge watching has been offered here, in line with work by Jenner (2015), suggesting that, while the specific number of episodes required for a binge may differ from person to person, the perception of binge watching can exist as long as a viewer is watching multiple episodes sequentially to the exclusion of other activity. Such a definition can clarify binge watching, and allow for operational definitions to be built to compliment it.

Additionally, the work done here bridges empirical research with cultural studies work by Mittell (2015a) in arguing that bingeability differs by type of programming. These findings serve as the beginning for future work into bingeability and theory building surrounding the concept. Further, theories connecting bingeability and binge watching can commence.
Importantly, the work done here found that shows that are highly bingeable are not necessarily enjoyable when they are actually binge watched; this has implications for literature in the areas of media selection; while media selection work tends to focus on why individuals select certain choices to watch, the research here suggests that different choices are selected based on how individuals watch, thus incorporating the method of viewing into our understanding of media selection.

**Engagement**

The findings of Study 2 have implications for current understandings of engagement variables—identification and PSI in particular. The results suggest that identification appears to be closely tied to the content of the entertainment itself; in this study, identification changed over time with different episodes. Interestingly, a different pattern was observed for PSI; while both are character-based variables, they differ in social distance, and this difference appears to be affected differently by a change in viewing method. PSI in particular was sensitive to changes in viewing method. Thus, while PSI is currently understood in terms of content variables related to the character, the viewing method does seem to have the ability to enhance or mitigate the formation of parasocial relationships. Thus, the method by which viewers consume the entertainment media is an important consideration for future theorizing into PSI.

**Social Aspects of Binge Watching**

Prior research has categorized television viewing as a social utility, and social pressure in particular can lead to feelings of connection when shows are shared between friends or isolation when one friend has not seen the program (Morrison & Krugman, 2001). Consistent with this literature, participants were found to binge watch programs that they knew their friends either
watched or would discuss. It is possible that fear of isolation is one of the reasons behind the increased bingeability of these shows.

However, the results of the second study indicate that, although social pressures may inspire a person to binge watch a certain show, binge watching does not necessarily generate social pressure in turn. While the results of Study 1 and Study 2 may be seemingly inconsistent, given that participants in Study 2 did not choose the show they consumed, the results do share insights about the nature of social viewing. It could be that participants who binge watched the show felt fatigued from extended viewing; in any case, the findings of Study 2 offer interesting insights for research into television as a social utility. In particular, the viewing method involved in the viewing process has an impact on the social utility.

**Practical Implications**

The results of this dissertation also have implications for television practice. In particular, while services like Netflix have explicitly created content with the intention that it be binged, findings here indicate that this strategy may not be the best; in fact, it is the shows that are not binged that individuals display more affinity for. Viewers build deeper relationships over time when the show is not binged, they indicate more positive appraisals when the show is not binged, and they display more intention to share information about the show when the show is not binged. That is not to say that having multiple episodes available at once is not viable; in fact, participants in Study 1 did tend to binge watch shows when they knew their peers had seen or were discussing them. Based on the results of this research, the best model may be a mix of week-to-week and binging, similar to how Hulu premiered *The Handmaid’s Tale*. The first three episodes of the program were released at once; from there, a new episode was released each week, with previous episodes available for viewers to catch up at their leisure.
Likewise, there are similar implications for network executives, for whom week-to-week episodes are the norm; while it seems that week-to-week viewing may be more enjoyable and allow for deeper formation of parasocial relationships, it may also worthwhile to host previous episodes on a VOD service, either owned by the network (e.g., HBO Go) or not (e.g., Hulu). That way, viewers can catch up on shows they feel pressured to watch and then enjoy the program on a week-to-week basis once they have reached current episodes.

Finally, given that many cable and network channels are still largely funded by advertising, there are implications for advertisers; namely, viewers still enjoy programming that is shown on a week-to-week basis. Thus, it is fruitful to continue advertising on these sorts of programming. However, it is important to examine where individuals watch, even if they do so week-to-week. For instance, if participants watch weekly episodes on Hulu, which does allow for outside advertising, then this is where advertisers should invest.

**Limitations and Directions for Future Research**

Of course, with every study, there are limitations to be discussed. Perhaps the most significant limitation of the present study lies in Study 2—a single show was selected for use in the study. This decision was made for purposes of experimental control; a show was selected that would be considered bingeable, due to its suspenseful, serialized nature. However, this may have negatively impacted the manipulation of suspense, given that suspense was relatively high in every case, and conclusions about different types of shows cannot be conclusively drawn. Future research should further explore how different types of shows may impact users as they are binged.

The specific content of the show should also be mentioned here; *The Night Of* features graphic violence, and implications of racialized police practices; issues that are somewhat heavy
and can be difficult to process. Based on the results of the studies here, it cannot be ruled out that the heaviness of these topics may have influenced the results. Thus, it is vital for future research to explore content in relation to binge watching more heavily.

Additionally, while the study here is high in internal validity, the external validity is lower due to the experimental controls enacted. In particular, viewers tend to binge watch programs that they have selected; within the experiment, participants were made to watch a program selected by the researcher. The participants therefore had little control over their own behaviors, contrary to what would occur in a natural setting. Therefore, future research should consider offering the participants greater control; it could be the case that the results differ when the participants are allowed to choose the shows they binge.

Further, many of the items used in the study were created specifically for the purposes of the study and were therefore not subjected to full validation. As a result, some of the variables, such as character complexity, plot complexity, or anticipation, are subject to questions regarding their validity. Future research must be conducted to elucidate these variables more clearly for use in examining content differences.

Finally, it is important to note that Study 2 used a student sample. Although this selection of sampling was made purposively due to this population’s likelihood to binge watch, the results are therefore only generalizable to this population. It could be that different populations would respond differently to binge watching. Thus, further research should be conducted utilizing different populations.

**Conclusion**

Binge watching as a behavior has increased over the past few years, becoming an activity free from the negative connotations of the word “binge” and crossing into mainstream behavior.
The goal of this dissertation was to explore binge watching from two perspectives; the factors that influence a show’s bingeability, and the effects of binge watching on narrative processing. The project revealed that a show’s suspense, seriality, and social pressures can influence a person to binge watch it. Meanwhile, binge watching a show actually had a negative impact on the formation of parasocial relationships, positive appraisals of the show, and likelihood to recommend. These results form the basis for future research into binge watching, and deepen our understanding of the phenomenon.
References


Warren, S. M. (2016). *Binge-watching rate as a predictor of viewer transportation mechanisms.* (Master of Arts in Media Studies), Syracuse University.


Appendix A: Pretest Questionnaire

Title of Project: Television Watching Habits
Principal Investigators:
Arienne Ferchaud
201 Carnegie Building
Penn State University
Email amf345@psu.edu

1. Purpose of the Study: The study in which you will be participating is part of a project intended to evaluate how people watch television. In this study, you will watch three episodes of a television program and answer questions. It should take no more than 90 minutes. If you agree to take part in the study, you will be asked to answer a series of questions regarding your thoughts and opinions.

2. Procedures to be followed: You will be asked to watch three episodes of a program and answer questions about them.

3. Discomforts and Risks: There are no risks or discomfort associated with participating in this research beyond those experienced in everyday life.

4. Benefits: By participating in the study, you will experience first-hand research methods and procedures that are commonly employed in mass-communications research.

5. Statement of confidentiality: This research does not ask for any information that would identify who the responses belong to. Therefore, your responses are completely anonymous. If this research is published, no information that could identify you will be written because your identity is in no way linked to your responses.

6. Right to Ask Questions: You can ask questions about this research. Contact Arienne Ferchaud at amf345@psu.edu. You can also email if you have concerns about this research, or if you feel that you have been harmed by this study. If you have questions about your rights as a research participant, or you have concerns or general questions about the research, contact Penn State University's Office for Research Protections at (814) 865-1775. You may also call this number if you cannot reach the research team or wish to talk to someone else.

8. Voluntary Participation: You do not have to participate in this research. You can stop your participation at any time. You do not have to answer any questions that you do not want to answer. You must be 18 years of age or older to consent to participate in this research study. You must be 18 years of age or older to take part in this research study. The completion of the online survey implies that you have read the information in this form and consent to participate in the research.

What is your gender?

Male (1)
Female (2)
Other (3)

What is your age (please input a number only)?

________________________________________________________________
What is your race/ethnicity (please select all that apply)

Black/African-American (1)
White/Caucasian (2)
Asian/Pacific-Islander (3)
Hispanic/Latino (6)
Native American/Indigenous (4)
Other (please list) (5) ________________________________________________

Which of the following industries most closely matches the one in which you are employed?

Forestry, fishing, hunting or agriculture support (1)
Real estate or rental and leasing (2)
Mining (3)
Professional, scientific or technical services (4)
Utilities (5)
Management of companies or enterprises (6)
Construction (7)
Admin, support, waste management or remediation services (8)
Manufacturing (9)
K-12 education (10)
Higher education (21)
Wholesale trade (11)
Health care or social assistance (12)
Retail trade (13)
Arts, entertainment or recreation (14)
Transportation or warehousing (15)
Accommodation or food services (16)
Information (17)
Finance or insurance (19)
Other (20)
None/Not employed (22)
Which of the following television watching platforms do you use (please select all that apply)?

- Video-on-demand service (e.g., Netflix, Amazon Prime Video) (1)
- Broadcast Networks (e.g., NBC, Fox, CBS) (2)
- Cable Networks (e.g., AMC, FX, Cartoon Network) (3)
- Premium Cable Networks (e.g., HBO, Starz, Showtime) (4)
- Other (please list) (5) ________________________________________________

Do you ever binge watch any television programs?

- Yes (1)
- No (2)

Please list a television program that you have binge watched/watched on a week-to-week basis.

____________________________________________________________________

____________________________________________________________________

Why did you binge watch this program/watch this show on a week-to-week basis?

____________________________________________________________________

____________________________________________________________________
What genre is this show? Please select all that apply.

Comedy (1)
Thriller (2)
Drama (3)
Action/Adventure (4)
Crime (5)
Reality (6)
Mystery (7)
Documentary (8)
Cooking (9)
Cartoon/Animation (10)
Horror (11)
Soap Opera (12)
Musical (13)
Game show (14)
Erotica (15)
Romance (16)
Sports (17)
Talk Show (18)
Other (19) ________________________________________________

How long is one episode of this program (in minutes, please list number only)?

________________________________________________________________

What channel/network/service did you watch this program on?

________________________________________________________________
How would you define binge watching?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

How many episodes would you need to watch of a 30 minute television program before it's considered to be "binge watching?"

____________________________________________________________________

How many episodes would you need to watch of a 60 minute television program before it's considered to be "binge watching?"

____________________________________________________________________

Thinking about the term "binge-watching," would you consider it to be positive, negative, or neutral? Why?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Approximately how many hours per week do you spend watching television (please input a number only)?

____________________________________________________________________
Approximately how many times per week do you binge watch television?

________________________________________________________________

How many hours per week do you binge watch (please input a number only)?

_______________________________________________________________

Approximately what percentage of your TV time is spent binge watching (please input a number only)?

________________________________________________________________
Appendix B: Study 1 Questionnaire

Title of Project: Television Watching Habits
Principal Investigators:
Arienne Ferchaud
201 Carnegie Building
Penn State University
Email amf345@psu.edu

1. Purpose of the Study: The study in which you will be participating is part of a project intended to evaluate how people watch television. This research uses a survey, which will last about 15-20 minutes. If you agree to take part in the study, you will be asked to answer a series of questions regarding your thoughts and opinions.

2. Procedures to be followed: You will be asked to answer questions on a survey.

3. Discomforts and Risks: There are no risks or discomfort associated with participating in this research beyond those experienced in everyday life.

4. Benefits: By participating in the study, you will experience first-hand research methods and procedures that are commonly employed in mass-communications research.

5. Statement of confidentiality: This research does not ask for any information that would identify who the responses belong to. Therefore, your responses are completely anonymous. If this research is published, no information that could identify you will be written because your identity is in no way linked to your responses.

6. Right to Ask Questions: You can ask questions about this research. Contact Arienne Ferchaud at amf345@psu.edu. You can also email if you have concerns about this research, or if you feel that you have been harmed by this study. If you have questions about your rights as a research participant, or you have concerns or general questions about the research, contact Penn State University's Office for Research Protections at (814) 865-1775. You may also call this number if you cannot reach the research team or wish to talk to someone else.

8. Voluntary Participation: You do not have to participate in this research. You can stop your participation at any time. You do not have to answer any questions that you do not want to answer. You must be 18 years of age or older to consent to participate in this research study.

You must be 18 years of age or older to take part in this research study. The completion of the online survey implies that you have read the information in this form and consent to participate in the research.

What is your gender?

Male (1)
Female (2)
Other (3)
How old are you (please enter a whole number only)?

________________________________________________________________

What is your ethnicity (please select as many as apply)?

- Black/African-American (1)
- White/Caucasian (2)
- Native American (3)
- Asian/Pacific-Islander (4)
- Hispanic/Latino (5)
- Other (please list) (6) ________________________________________________

Approximately how many hours per week do you watch television (please list a whole number only)?

________________________________________________________________

In a typical television-watching session, how many hours do you usually spend watching the same television show?

________________________________________________________________

________________________________________________________________
How often do you binge watch television programming?

Never (1)

(2)

(3)

(4)

(5)

(6)

Frequently (7)

Which of the following do you use to watch television programs (select as many as apply)?

Broadcast channels (e.g., CBS, NBC) (1)

Cable channels (e.g., AMC, FX) (2)

Premium cable channels (e.g., HBO, Starz) (3)

DVR (4)

Netflix (5)

Amazon Prime Video (6)

Hulu (7)

OnDemand (8)

Other (please list) (9) ________________________________________________

In the space below, please list a scripted fictional television show that you have binge watched (watched on a week-to-week basis).

________________________________________________________________
What genre would you consider this program to be (please check all that apply)?

- Action/Adventure (1)
- Drama (2)
- Animated (3)
- Comedy (4)
- Documentary (5)
- Horror (6)
- Musical (7)
- Cooking/Food (8)
- Historical (9)
- Sports (10)
- Sci-Fi (11)
- Fantasy (12)
- Romance (13)
Thinking about the show you just listed, please indicate how much you agree with the following statements:

1. The protagonist in this program sometimes does bad things to get what they want. (1)
2. I feel that the main character is morally ambiguous. (2)
3. The characters in this show are neither all good nor all bad.
4. There are multiple storylines occurring simultaneously within this show.
5. This story is shown from multiple points of view.
6. The characters in the story face many complications
7. Multiple storylines tend to happen at the same time.
8. Generally, I find this program exciting.
9. The show grips me.
10. I am often in suspense while watching this show.
11. I feel expectant while watching this show.
12. This show is thrilling.
13. Please select "strongly agree" for this question.
14. I could not miss an episode of this program and still keep up with the story.
15. This show has a long storyline that stretches over multiple episodes.
16. The plot of this show unfolds over several episodes.
17. I can watch this show whenever I want.
18. This show is easy to find when I want to watch it.
19. There are few barriers to watching this program when I want to.
20. I think there is a good chance that friends or peers around me will talk about this show on some occasions.
21. As far as I know, many of my friends or peers watch this show.
22. In the future, I might make a joke with friends or peers using contents from this show.
23. In the future, my friends or peers might make a joke using content from this show.
24. When I sit in front of my TV to watch this show, I know that some of my friends or peers also watch the same show.
25. Given the option, I would prefer to binge watch this program as quickly as possible.
26. I would rather binge watch this program than watch on a weekly basis.
27. I would enjoy watching several episodes of this program in a single sitting.
28. This program is of high quality.
29. This is a really good show.
30. Most people would agree that this is a good show.
Now, you will be presented with a list of several television programs. Please choose up to 2 programs from this list that you have binge watched (watched on a week-to-week basis). If you have not watched any of these programs, simply leave this question blank.

- House of Cards (1)
- Grey’s Anatomy (2)
- Breaking Bad (3)
- Unbreakable Kimmy Schmidt (4)
- Gilmore Girls (5)
- Game of Thrones (6)
- Stranger Things (7)
- Shameless (8)
- Orange is the New Black (9)
- Outlander (10)
- The Keepers (11)
- Big Bang Theory (12)
- NCIS (13)
- Scandal (14)
- This is Us (15)
- Modern Family (16)
- Real Housewives (17)
- RuPaul’s Drag Race (18)
- Downton Abbey (19)
- Law and Order (20)
- Madame Secretary (21)
You have selected **Show 1.** What genre would you consider this program to be (please check all that apply)?

- Action/Adventure (1)
- Drama (2)
- Animated (3)
- Comedy (4)
- Documentary (5)
- Horror (6)
- Musical (7)
- Cooking/Food (8)
- Historical (9)
- Sports (10)
- Sci-Fi (11)
- Fantasy (12)
- Romance (13)
You have selected **Show 1.** Thinking about this program, please rate your level of agreement with the following statements.

1. The protagonist in this program sometimes does bad things to get what they want. (1)
2. I feel that the main character is morally ambiguous. (2)
3. The characters in this show are neither all good nor all bad.
4. There are multiple storylines occurring simultaneously within this show.
5. This story is shown from multiple points of view.
6. The characters in the story face many complications
7. Multiple storylines tend to happen at the same time.
8. Generally, I find this program exciting.
9. The show grips me.
10. I am often in suspense while watching this show.
11. I feel expectant while watching this show.
12. This show is thrilling.
13. Please select "strongly agree" for this question.
14. I could not miss an episode of this program and still keep up with the story.
15. This show has a long storyline that stretches over multiple episodes.
16. The plot of this show unfolds over several episodes.
17. I can watch this show whenever I want.
18. This show is easy to find when I want to watch it.
19. There are few barriers to watching this program when I want to.
20. I think there is a good chance that friends or peers around me will talk about this show on some occasions.
21. As far as I know, many of my friends or peers watch this show.
22. In the future, I might make a joke with friends or peers using contents from this show.
23. In the future, my friends or peers might make a joke using content from this show.
24. When I sit in front of my TV to watch this show, I know that some of my friends or peers also watch the same show.
25. Given the option, I would prefer to binge watch this program as quickly as possible.
26. I would rather binge watch this program than watch on a weekly basis.
27. I would enjoy watching several episodes of this program in a single sitting.
28. This program is of high quality.
29. This is a really good show.
30. Most people would agree that this is a good show.
You have selected **Show 2.** What genre would you consider this program to be (please check all that apply)?

- Action/Adventure (1)
- Drama (2)
- Animated (3)
- Comedy (4)
- Documentary (5)
- Horror (6)
- Musical (7)
- Cooking/Food (8)
- Historical (9)
- Sports (10)
- Sci-Fi (11)
- Fantasy (12)
- Romance (13)
You have selected **Show 2**. Thinking about this program, please rate your level of agreement with the following statements.

1. The protagonist in this program sometimes does bad things to get what they want. (1)
2. I feel that the main character is morally ambiguous. (2)
3. The characters in this show are neither all good nor all bad.
4. There are multiple storylines occurring simultaneously within this show.
5. This story is shown from multiple points of view.
6. The characters in the story face many complications
7. Multiple storylines tend to happen at the same time.
8. Generally, I find this program exciting.
9. The show grips me.
10. I am often in suspense while watching this show.
11. I feel expectant while watching this show.
12. This show is thrilling.
13. Please select "strongly agree" for this question.
14. I could not miss an episode of this program and still keep up with the story.
15. This show has a long storyline that stretches over multiple episodes.
16. The plot of this show unfolds over several episodes.
17. I can watch this show whenever I want.
18. This show is easy to find when I want to watch it.
19. There are few barriers to watching this program when I want to.
20. I think there is a good chance that friends or peers around me will talk about this show on some occasions.
21. As far as I know, many of my friends or peers watch this show.
22. In the future, I might make a joke with friends or peers using contents from this show.
23. In the future, my friends or peers might make a joke using content from this show.
24. When I sit in front of my TV to watch this show, I know that some of my friends or peers also watch the same show.
25. Given the option, I would prefer to binge watch this program as quickly as possible.
26. I would rather binge watch this program than watch on a weekly basis.
27. I would enjoy watching several episodes of this program in a single sitting.
28. This program is of high quality.
29. This is a really good show.
30. Most people would agree that this is a good show.
Appendix C: Study 2 Questionnaire

Title of Project: TV Watching
Principal Investigators:
Arienne Ferchaud
201 Carnegie Building
Penn State University
Email amf345@psu.edu

1. Purpose of the Study: The study in which you will be participating is part of a project intended to evaluate how people watch television. This research uses a survey, which will last about 15-20 minutes. If you agree to take part in the study, you will be asked to answer a series of questions regarding your thoughts and opinions.

2. Procedures to be followed: You will be asked to answer questions on a survey.

3. Discomforts and Risks: There are no risks or discomfort associated with participating in this research beyond those experienced in everyday life.

4. Benefits: By participating in the study, you will experience first-hand research methods and procedures that are commonly employed in mass-communications research.

5. Statement of confidentiality: This research does not ask for any information that would identify who the responses belong to. Therefore, your responses are completely anonymous. If this research is published, no information that could identify you will be written because your identity is in no way linked to your responses.

6. Right to Ask Questions: You can ask questions about this research. Contact Arienne Ferchaud at amf345@psu.edu. You can also email if you have concerns about this research, or if you feel that you have been harmed by this study. If you have questions about your rights as a research participant, or you have concerns or general questions about the research, contact Penn State University's Office for Research Protections at (814) 865-1775. You may also call this number if you cannot reach the research team or wish to talk to someone else.

8. Voluntary Participation: You do not have to participate in this research. You can stop your participation at any time. You do not have to answer any questions that you do not want to answer. You must be 18 years of age or older to consent to participate in this research study.

You must be 18 years of age or older to take part in this research study. The completion of the online survey implies that you have read the information in this form and consent to participate in the research.

If you agree to participate in this study, please click the button to continue.

Please list your email address below. Please make sure this is an email address you check regularly.

Please note: Please do not list an email address that forwards to a different email address; this can cause issues with the project.
What is your gender?

- Male (1)
- Female (2)
- Other (3)

What is your age (please list a whole number)?

________________________________________

What is your race/ethnicity (please select all that apply)?

- White (1)
- Black or African American (2)
- American Indian or Alaska Native (3)
- Asian (4)
- Hispanic/Latino (5)
- Native Hawaiian or Pacific Islander (6)
- Other (7) ________________________________

Test Video Instructions

In a moment, you will begin watching episodes from the television program The Night Of. Before proceeding, please test your audio and video on the clip displayed on the next page.

Test Video

If all is working well, please proceed.

If you are having trouble, you may not have flash video installed. Click here for more information: https://get.adobe.com/flashplayer/
You are about to watch episodes from a television program called The Night Of. This show is about a young Pakistani-American college student, Naz, whose life changes drastically after a night filled with drugs and sex.

This show features intense moments, violence, sexual activity, and depictions of drug use. If at any time, the show is too intense, you may quit the questionnaire without penalty.

**Video 1**

What vehicle did Naz take after his friend cancelled on him?

________________________________________________________________

Thinking about the episode you just watched, and the main character, Naz, please rate your level of agreement with the following statements.

1. I could picture myself in the show as events happened.
2. I was mentally involved in the narrative.
3. After finishing the narrative, I found it easy to put it out of my mind.
4. The narrative affected me emotionally.
5. I was able to understand the events in the program in a manner similar to that in which the main character understood them.
6. I think I have a good understanding of Naz.
7. I tend to understand the reasons why Naz does what he does.
8. While viewing the show, I could feel the emotions Naz portrayed.
9. During viewing, I felt I could really get inside Naz’s head.
10. At key moments in the show, I felt I knew exactly what Naz was going through.
11. While viewing the show, I wanted Naz to succeed in achieving his goals.
12. When Naz succeeded, I felt joy, but when he failed, I was sad.
13. I carefully followed Naz's behavior.
14. I hardly thought about why Naz did certain things he did.
15. I kept wondering if I knew people that are similar to Naz.
16. I became aware of aspects of Naz that I really liked or disliked.
17. I kept asking myself how things would evolve around Naz.
18. Occasionally, I wondered whether Naz was similar to me or not.
20. If Naz felt bad, I felt bad as well. If Naz felt good, I felt good as well.
21. Naz left me rather sober and unaffected.
22. Whatever Naz said or did, I kept still.
23. Occasionally, I said something to Naz on impulse.
24. Sometimes, I felt like speaking out to Naz.
25. This was a heart-pounding kind of show.
26. The episode was suspenseful.
27. I was on the edge of my seat while watching this show.
28. I look forward to watching more of this show.

**Video 2**

Why was Naz taken to the police station?

______________________________

Thinking about the episode you just watched, and the main character, Naz, please rate your level of agreement with the following statements.

1. I could picture myself in the show as events happened.
2. I was mentally involved in the narrative.
3. After finishing the narrative, I found it easy to put it out of my mind.
4. The narrative affected me emotionally.
5. I was able to understand the events in the program in a manner similar to that in which the main character understood them.
6. I think I have a good understanding of Naz.
7. I tend to understand the reasons why Naz does what he does.
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23. Occasionally, I said something to Naz on impulse.
24. Sometimes, I felt like speaking out to Naz.
25. This was a heart-pounding kind of show.
26. The episode was suspenseful.
27. I was on the edge of my seat while watching this show.
28. I look forward to watching more of this show.

**Video 3**

What advice does Naz's lawyer give him?

__________________________________________________________________________

Thinking about the episode you just watched, and the main character, Naz, please rate your level of agreement with the following statements.

1. I could picture myself in the show as events happened.
2. I was mentally involved in the narrative.
3. After finishing the narrative, I found it easy to put it out of my mind.
4. The narrative affected me emotionally.
5. I was able to understand the events in the program in a manner similar to that in which the main character understood them.
6. I think I have a good understanding of Naz.
7. I tend to understand the reasons why Naz does what he does.
8. While viewing the show, I could feel the emotions Naz portrayed.
9. During viewing, I felt I could really get inside Naz’s head.
10. At key moments in the show, I felt I knew exactly what Naz was going through.
11. While viewing the show, I wanted Naz to succeed in achieving his goals.
12. When Naz succeeded, I felt joy, but when he failed, I was sad.
13. I carefully followed Naz's behavior.
14. I hardly thought about why Naz did certain things he did.
15. I kept wondering if I knew people that are similar to Naz.
16. I became aware of aspects of Naz that I really liked or disliked.
17. I kept asking myself how things would evolve around Naz.
18. Occasionally, I wondered whether Naz was similar to me or not.
20. If Naz felt bad, I felt bad as well. If Naz felt good, I felt good as well.
21. Naz left me rather sober and unaffected.
22. Whatever Naz said or did, I kept still.
23. Occasionally, I said something to Naz on impulse.
24. Sometimes, I felt like speaking out to Naz.
25. This was a heart-pounding kind of show.
26. The episode was suspenseful.
27. I was on the edge of my seat while watching this show.
28. I look forward to watching more of this show.

Thinking about the television show as a whole, please rate your level of agreement with the following statements.

1. It was fun for me to watch this show.
2. I had a good time watching this program.
3. The show was entertaining.
4. I found this show to be very meaningful.
5. I was moved by this TV show.
6. The show was thought-provoking.
7. This was a heart-pounding kind of show.
8. The show was suspenseful.
9. I was on the edge of my seat while watching this show.

Thinking about the television show as a whole, please rate your level of agreement with the following statements.

1. I intend to talk about this show.
2. I intend to tell my friends about this show.
3. I intend to talk about this show on every possible occasion.
4. I intend to provide as many details as I can about the show to others.
5. I have good things to say about the show.
6. I will recommend my friends to watch this show.
7. I have bad things to say about the show.
8. I will recommend my friends not to watch the show.
9. I would pass along this show to others.
10. I would pass this show along as an interesting story.
11. I would pass this show along if somebody else talked about something similar.

Thinking about the show you just watched, how likely are you to discuss it via the following methods?

1. Facebook
2. Twitter
3. Instagram
4. Snapchat
5. Face-to-face conversation
6. Text message
7. Email
8. Phone call

Thinking about the way you are feeling right now, please indicate your level of agreement with the following statements.

1. I've been feeling optimistic about the future.
2. I've been feeling useful.
3. I've been feeling interested in other people.
4. I've had energy to spare.
5. I've been dealing with problems well.
6. I've been thinking clearly.
7. I've been feeling good about myself.
8. I've been feeling close to other people.
9. I've been feeling confident.
10. I've been able to make my own mind up about things.
11. I've been feeling loved.
12. I've been interested in new things.
13. I've been feeling cheerful.

Have you ever seen this program before?

Yes (1)

No (2)
VITA

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EDUCATION
Ph.D. in Mass Communications, Penn State University, 2018
M.A. in Media Studies, Penn State University, 2015
B.A. in Mass Communication—Advertising, Louisiana State University, 2013

SELECTED PUBLICATIONS
• Ferchaud, A. & Sanders, M.S. (Accepted pending revision) Seeing through the avatar’s eyes: Effects of point-of-view and ender match on identification and enjoyment. *Imagination, Cognition and Personality.*

SERVICE
• Undergraduate Research Mentor, Pennsylvania State University Summer Research Opportunities Program
• Graduate Student Representative, Mass Communication Division, National Communication Association
• President, Communications Graduate Forum, Bellisario College of Communications, Pennsylvania State University

AWARDS AND HONORS
• Top Flashlight Paper—Games Studies Division, International Communication Association
• Douglas and Claudia Anderson Communications Scholarship