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Is Binge Watching Bad for You?

Escapism, Stress, Self-Control

and Gratifications

Weipu Wang

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Arts

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ABSTRACT

Is Binge Watching Bad for You? Escapism, Stress, Self-Control and Gratifications?

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The relatively new phenomenon of binge watching presents a dramatic shift from the norm of traditional television viewing. However, is this ubiquitously popular media marathon that contains negative connotations really bad for you? A survey administered to 157 television binge-watchers identified the role of stress and self-control in influencing both the gratifications sought and the consequences of binge watching through the Structural Equation Modeling (SEM) analysis. The current study found that binge watching to avoid problems is a commonly employed strategy for individuals to cope with stress. However, engaging in binge-watching behavior as a coping mechanism to purposefully avoid problems can result in feelings of guilt and regret. It is also surprising that self-control has no impact on one's binge watching gratifications. The findings of this thesis encourage future researchers and binge watching lovers to view this new behavior from a new perspective and to practice it with caution.

Keywords: binge watching, escapism, media habits, stress

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Introduction

New technologies, such as online streaming and digital recording, have ended the practice of traditional television appointment viewing. A report from PricewaterhouseCoopers (2014) showed that 63% of American households watch television using a streaming service. This unprecedented control and access to television content has brought with it a new viewing practice of “binge-watching,” defined as “watching more than two episodes of the same TV program in one setting” (Walton-Pattison, Dombrowski, & Pesseau, 2018, p. 35). Binge watching is not only on the rise (Jurgensen, 2012) but has become a socially acceptable practice for some people (Sung, Kang, & Lee, 2018).

There are a variety of reasons why a person may choose to engage in binge watching. Binge watching makes television viewing more enjoyable and helps viewers to better connect with the characters (Papacharissi & Mendelson, 2007). This practice has also been found to help individuals to relax, better connect with others, and obtain more information from the material they are watching (Sung et al., 2018).

Binge watching is a relatively new activity that has both health and psychological implications. Although prior research has established the association between media bingeing and increased anxiety, depression, loneliness, fatigue and even addiction (Devasagayam, 2014; De Feijter, Kahn & Van Gisbergen, 2016; Riddle, Peebles, Davis, Xu & Schroeder, 2017), few studies have investigated what external and internal factors can lead to binge watching activities. This study will be the first to focus on the role of different motivations for binge watching, with a focus on escapism in binge-watching behavior, through which individuals seek to alleviate stress. This study relies on uses and gratifications theory to frame its approach, and structural equation modeling (SEM) as its analytical technique. The study further explores the role of stress

and self-control in shaping gratifications of binge watching activity. The higher-level goal of this study is to investigate which factors cause individuals to binge watch and whether their levels of stress and self-control contribute to specific binge-watching gratifications, with a specific focus on negative gratifications including feelings of guilt and regret.

Overall, this study aims to explicate binge watching behavior; to explain the connections between related gratifications sought from television, the Internet, and binge watching; and to explore the role of stress, self-control, and escapism in shaping binge watching behavior.

Literature Review

Understanding Binge Watching

Operationally defining binge watching is a challenging prospect, because binge watching is a highly individualized and emotional activity (Rubenking & Bracken, 2018). The complexities that are associated with individuality and emotion (Perks, 2014) in binge watching make constructing a universally proper definition that would work for every viewer a strenuous task. Therefore, those convolutions and complications in binge watching call for researchers to develop a thorough understanding of this new media habit.

Although there is no consensus on what constitutes binge watching within the academic literature, Walton-Pattison et al. (2018) provide the most widely adopted definition: “watching more than two episodes of the same TV show in the same sitting” (p. 23). However, Jenner (2016) argues that this definition ignores the unique human-technology interface in binge watching. The critic from Jenner (2016) invites readers to fully comprehend the unique technological background of binge watching.

Online streaming replaces appointment viewing. The most distinctive technological advancement associated with binge watching is that binge watching is not conventional TV watching (Jenner, 2016). As binge watching is enabled by online streaming services (Hirsen, 2015), it bears characteristic uniqueness to new technology.

Online streaming and the Internet have made television viewing unprecedentedly easy and accessible (Wijndaele et al., 2010). Flexibility and convenience are the major reasons that young viewers have shifted from appointment television to online streaming services (Logan, 2011). Appointment television is the more traditional method of television viewing, in which people set an “appointment” to watch and the content and schedule are set by television companies (Castleman & Podrazik, 2003). Viewers watch a particular show that is set by the TV network, and viewers have to watch it at that pre-scheduled time.

While appointment television sets the parameters for its audience, online streaming allows the audience to have maximum control over the content, pace, and scheduling (Jenner, 2017). Scott Eidler (2011) of the Washington Post reported, “No longer do college students and young professionals sync their schedules with network prime-time lineups. NBC’s ‘30 Rock’ is broadcast on TV at 10 p.m. Thursdays, but for many, the show is after their last class on Fridays at 2 p.m. on Hulu.” From the time since Eidler’s quote to the present day, streaming services have been innovated beyond simply providing currently-airing television programming to viewers at any time.

Online streaming has also dramatically increased television’s spatiotemporal ubiquity (Jones, 2009). Currently, streaming services offer a large variety of programming including shows no longer airing on television, previous seasons of currently airing shows, as well as movies and a wide array of original content. Within any streaming service platform, there is

unlimited content available to watch at any given time, and, with the availability of devices now available, the content is available to watch nearly anywhere (Delen, Liew, & Willson, 2014).

Jenner (2017) explained that under binge watching “the viewing is autonomously scheduled: control over one’s own viewing behaviour is only possible because control over scheduling, traditionally in the hands of the broadcaster, is given to the viewer” (p. 308). This viewer control is one of the major features that distinguishes binge watching from appointment TV watching as Jenner (2017) argued that binge watching “is not watching consecutive hours of scheduled television” (p. 309), but to watch serialized TV shows under a self-managed schedule and pace (Jenner, 2017). Following this understanding, users’ autonomy along with the associated psychological, cognitive, and emotional factors involved in binge watching need to be further studied in order to better understand this new behavior.

Binge watching as “excessive” behavior. The definition of binge watching according to Walton-Pattison et al. (2018) assumes that binge watchers are watching more than two episodes of the same TV show in the same watching session. Jenner (2016) further argues that binge watching is a self-scheduled activity to ultimately make one feel pleased and satisfied. Binge watching as an “all-you-can-eat”-style media habit implies a limitlessness to the content that viewers are able to watch (Matrix, 2014).

The concept of binge watching centers on the term “binge,” which also hints at a sense of unlimitedness (Pierce-Grove, 2017) and a heavy rate of consumption (Mikos, 2016). The word “binge” also indicates an unconstrained and excessive amount of consumption in succession according to the Oxford Dictionary. Jenner (2017) further concluded that “a binge suggests the consecutive watching [of] several episodes of one series, uninterrupted by the flow of television, which includes advertising breaks and a variety of programs” (p. 307).

The currently existing definitions all center on the excessiveness and consecutiveness of the binge watching experience. These two characteristics emphasized within the Oxford Dictionaries definition of binge watching as “watching multiple episodes of (a television program) in rapid succession, typically by means of DVDs or digital streaming.”

The Digital Democracy Survey by Deloitte (2015) defined binge watching as “watching three or more episodes of a TV series in one sitting” (p. 5). According to a Netflix (2013) study, almost 73% of the survey respondents self-defined binge watching as “watching between 2-6 episodes of the same TV show in one sitting.” Schweidel and Moe (2016) further “decompose users’ viewing behavior into (1) whether the user continues the viewing session after each episode is viewed, (2) whether the next episode viewed is from the same or a different series, and (3) the time elapsed between sessions” (p. 25).

All definitions from the existing literature focus on the mechanical action of binge watching, without treating binge watching as a humanistic and emotional behavior (Rubenking & Bracken, 2018). As Shim et al. (2018) argued that further identifying “degrees of bingeing” (p. 1972) would be critical, there is a need to dig deeper into the psychological, cognitive, and emotional drives and influences of binge watching.

Binge watching as an emotional and cognitive activity. Online streaming services generate a culture of instant gratification and satisfy the sense of fantasy and escape (Matrix, 2014). Although bingeing behaviors, including binge drinking and binge eating, contain negative connotations (Lynch, Everingham, Dubitzky, Hartman, & Kasser, 2000), unlike other forms of bingeing behaviors, binge watching is often socially accepted and even socially expected (Panda & Pandey, 2017). The popularity and social acceptance of binge watching indicates that viewers

achieve more than just satisfaction from watching TV content for an extended period of time but that they are also able to fulfill their emotional needs (Rubenking & Bracken, 2018)

Perks (2014) discovered that emotional and cognitive participation are both necessary to participate in binge watching experiences, which are characterized as being both intense and consecutive in nature. Brunsdon (2012) explained that binge watchers were able to gain “complex pleasures of narrative” (p.86), in which one is eager to know what will happen the next and hope that the story would not end.

Binge watching was also found to be a cultural activity that involved adaptations (Perks, 2014). The high time commitment (Jenner, 2016), along with the intense cognitive attention required (Perks, 2014), demands that viewers integrate binge watching into their daily life and adapt to their social and personal circumstances.

Currently, there is a dearth in the literature that seeks to understand binge watching from the perspective of psychological and emotional motivations. To better analyze the psychological and emotional factors associated with binge watching, one must first understand why people engage in binge watching.

Theoretical Frame of Why We Binge Watch

To assess reasons why people binge watch, uses and gratifications theory (UGT) is a powerful tool (Katz, Blumler, & Gurevitch, 1973). UGT is a mass communications theory in which media consumers are assumed to have agency and control over their choices to engage with any media in order to fulfill various gratifications. Conlin, Billings, and Averset (2016) explain UGT thusly: “individuals manipulate and actively use a particular form of media to meet a specific need—a concept in direct opposition to the idea that media can overpower and

influence individual choices on what to consume” (p. 154). Individuals as active consumers consume media to fulfil specific needs (West & Turner, 2018).

Uses and gratifications and television. From the advent of television, studies have shown that, from a UGT perspective, people often choose to engage with television in order to fulfill a specific psychological desire (Katz et al., 1973). The gratifications sought may include, but are not limited to, dealing with stress or low moods, managing stress, escaping from reality, or alleviating boredom (Wang, Wang, Gaskin, & Wang, 2015). Boredom and stress are two of the most common negative affective experiences in modern society in the United States, and people are turning to television as a way to deal with both emotional states (Bryant & Zillman, 1984). For those most alienated from self, television offers “a ready means of structuring attention that permits both escape from and avoidance of the discomfort that normally occurs during idle time” (Kubey, 1986, p. 116-117).

Additionally, it must be noted that the earliest research linking stress to watching television acknowledges television’s ability to make viewers forget their woes for a brief time, though it warns that engaging in such behavior typically does not alleviate any chronic stress and may in fact cause more stress in the long-term (Pearlin, 1959). Over 50 years of television research confirms that the gratifications sought in consuming television are varied, but these same gratifications are still valid reasons why people engage with television and other new media in the present.

Uses and gratifications of online media. According to results from past research, the effects of Internet media are considered riskier than television (Leung, 2014). There are broad motivations for usage of computer-mediated technologies, including the Internet. These motivations range from socializing to escape to entertainment and many others (Leung, 2014).

As with any media, Internet-related media fits well within the scope of UGT because usage is driven by users' desires and emotions, which are the results of what Bartsch and Viehoff (2010) described as people went through cognitive processes to evaluate scenarios based on personal needs, goals and desires. Thus, when a person's emotions are driven by the needs and desires, or gratifications sought, they make choices about what to engage with based on the seeking after those gratifications (Bartsch & Viehoff, 2010)

Leung (2014) found that the more that users are having their sought gratifications fulfilled with these channels, such as, social media, online use, and binge watching, the more they will engage with them. Lin (2002) found that gratifications or expectation items—entertainment, escape, surveillance, companionship, social interaction and informational learning—were discovered to be strong indicators for online media use, which have only grown in the twenty-plus years since that study. Those gratification or expectation items are indeed similar to the gratifications linked to the studies of UGT in the context of television, but the difference with online media is the accessibility and virtual social connection that may stand in for real social connection (Lin, 2002; Jacobsen & Forste, 2011). Leung (2014) stated that “adolescents who habitually rely on social media to satisfy their entertainment, passing time, and information-seeking needs are often those who have difficulty controlling their Internet time” (p. 435).

Online media has become a place where many uses and gratifications are sought and fulfilled for a wide variety of consumers. The motivations and gratifications sought behind the usage are as varied as the consumers but include fear of social rejection and entertainment as primary motivators, both of which are critical motivators contributing to the behavior of binge watching.

Uses and gratifications of binge watching. Existing research into uses and gratifications for binge watching is promising. There is overlap between online media and television uses and gratifications but that helps only to further validate the uses and gratifications of engaging in binge watching. Motivators for binge watching vary. Sung et al. (2018) discovered from an online survey that entertainment, social interaction, and passing time are major catalysts for binge watching. Additionally, Pittman and Sheehan (2015) agreed that relaxation is a significant influence in binge-watching behavior. Other notable factors include hedonism and social engagement (Pittman & Sheehan, 2015).

One example of a gratification sought for binge watching television is the fear of missing out (FoMO). Conlin et al.'s (2016) study indicates that "FoMO could explain how people may opt to binge watch not because they prefer to, but rather for a presumed psychological need to do so, as not bingeing results in being excluded from conversational aspects and references of modern society" (p. 155).

The behavior of binge watching entered the common lexicon, and this type of bingeing behavior has become not only accepted, but often celebrated or expected (Jenner, 2017). The social acceptability may also lead to the personal acceptability of the practice, and others may even feel pressure to binge watch certain programs in order to fit into social situations and conversations (Jenner, 2017). Thus, social and individual psychological gratifications are sought as one chooses to engage in binge watching.

Jenner (2017) mentions that "binge-able texts also legitimize the viewing practice" (p. 305), which allows viewers to feel more at ease with their behavior, especially if coupled with bingeing in a social setting. These the content of the television programs is also a factor in how binge-worthy a program is; audiences tend to be attracted to "suspenseful, unresolved media

stories” and might find terminating watching difficult when a “conflict resolution” is not achieved (Knobloch-Westerwick & Keplinger, 2007, p.211). These texts, which allow viewers to immerse themselves in a story or action within the program, are enabling an escape, allowing viewers to forget their lives for a time and serving as key motivations for engagement in, and reinforcement of, binge-watching behavior (Pena, 2015). Of course, there are negative motivations and effects that may be seen as part of binge-watching behavior. Since escapism plays an important role in shaping binge watching activity, this concept needs to be explained more deeply.

Escapism

The concept of escapism is important in both media studies and behavioral science (Hirschman, 1983; Kardefelt-Winther, 2014). Escapism was first introduced into the mass media research by Vorderer & Hartmann (2009), who defined escapism as “the desire of ordinary people to seek refuge from the negative experiences of everyday life with the world of entertainment media” (p. 532). All bingeing activities are correlated with escapism, including binge eating (Heatherton & Baumeister, 1991), video games (Schwartz, 2006), binge drinking (Sadava et al., 1978), gambling (Reid et al., 2011), and compulsive shopping (Darrat, Darrat & Amyx, 2016). Katz and Foulke (1962) confirmed that escapism was a psychological process and that drives of deprivation or alienation would link to escapist behaviors. However, escapist motivations and their associated consequences are highly individualistic (Katz & Foulkes, 1962). Katz and Foulke (1962) also maintained that due to the relatively lower risks of consuming mass media, compared with other escapist activities such as drinking, using drugs, and suicide, media exposure was a commonly used escapist route, but it does not indicate that all escapist drives would explicitly lead to media consumption.

Over time, more elements and implications have been added to the concept of escapism. Baumeister and Scher (1988) argued that escapism is a shift from current issues to achieve a short-term escape from an aversive awareness of self. Evans (2001) defined escapism from the perspective of avoidance, explaining that escapism is often viewed as an avoidance of issues and areas of real life. Further building on the definition of Evans (2001), Calleja (2010) viewed escapism as the discrepancy and pain from the contrast between virtual and reality.

Theoretical development of escapism. Scholars have established theories to understand escapist drives. The escape theory of suicide was first introduced by Baechler (1980), and then revised by Baumeister (1990). The theory suggests that suicide is a form of escapist activity and that negative life stress and perfectionism lead to negative affect, including depression and anxiety, which can, in turn, develop into hopelessness and, eventually, suicidal behavior.

Following the escape theory of suicide, Heatherton and Baumeister (1991) laid the theoretical foundation for understanding escapism as they proposed the escape theory of binge eating to understand the motivation of binge eating behavior. Negative self-assessments, negative affect (depression and anxiety), cognitive narrowing and narrowed attention, and focus on simple actions are key elements to escapist behaviors, especially binge eating (Heatherton & Baumeister, 1991). Under those circumstances, individuals are more likely to reduce self-awareness to escape from unpleasant experiences. As a result, avoidance coping strategies were common among people who binge eat to escape (Baumeister, 1990).

Those escape theories are extended and applied to other escapism related studies. Other important motivations and drives of escapism include seeking self-esteem (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004), fantasy fulfillment (Hirschman, 1983), and discrepancies from expectations (Li, Liao, & Khoo, 2011). The psychological and behavioral

consequences of practicing escapism were found to be tension relief (Cappell, 1975), cognitive dissonance (Sadava, Thistle, & Forsyth, 1978), and psychological dependence (Cahalan & Room, 1974).

Motivations for and the effects of escapism may vary, but escapism is commonly used as a tool to escape from unpleasant mood states (Rockloff & Dyer, 2007; Li et al., 2011) or negative affect (Heatheron & Baumeister, 1991). For instance, although gamblers revealed that practicing escapism would not resolve their long-term problems in reality (Wood & Griffiths, 2007), escapism was still utilized to avoid the feeling of boredom and loneliness (Ledgerwood & Petry, 2006). As a result, escapism is commonly believed to be a coping strategy for individuals with a need to escape from negative experiences (Heatheron & Baumeister, 1991).

Escapism in media consumption. Since Hirschman and Holbrook (1982) raised academic attention toward the influence of fantasy over consumer behavior, scholars have extensively studied the abundant resources and activities that could separate reality from the fantasized imagination (Belk & Costa, 1998). The concept of escapism has therefore been extended from clinical and psychological studies to the field of business and media studies.

Escapism has been especially important and prevalent in media consumption. UGT lists escapism as one of the gratifications of media consumption (Katz et al., 1973). Since then, numerous studies have confirmed the effects of escapism on media usage: Vincent and Basil (1997) found that escapism remained a strong motivation for both print and broadcast media consumption. Currently, escapism is still one of the most important reasons why young people engage in social media (Whiting & Williams, 2013). Escapism, withstanding changes in technology over time, continues to be a strong drive and gratification for media usage.

Dotan and Cohen (1976) claimed that using media for escapist needs is the major reason people consumed media during war time. However, empirical discoveries are inconsistent. Kubey (1986) discovered that negative work experience and negative social interaction with people were related to escapism in TV consumption and that heavier viewers even reported feeling worse during so-called non-activities. Vitouch (1997) was not able to find a significant correlation among viewing amount and variables of work and external beliefs. Schulz (1996) assumed that escapist TV consumption was due to the German people's wish to make the hardships in life more bearable. Morgan (1984) also found a significant correlation between amount of TV consumption and quality of life. However, Espe & Seiwert (1987) was not able to find associations between perceived life satisfaction and TV viewing. This inconsistent empirical research demonstrates that external social causes are weaker indicators of escapist behaviors.

Escapism is also one of the prominent motivators for TV exposure (Henning & Vorderer, 2001). Hirschman (1983) defines escapism, stating, "individuals may purposely engage in behavior to escape unpleasantness in their lives" (p. 66). According to Hirschman's definition, avoiding unpleasantness from reality is at the core of the concept of escapism, and escapism is also a purposeful and voluntary action. From this conceptualization, escapism is an "avoidance-oriented" coping mechanism (Katz & Foulkes, 1962, p. 378). People engage in escapist activities to withdraw from daily activities (Katz & Foulkes, 1962), distract from negative self-awareness (Moskalenko & Heine, 2003), gain fantasizing gratifications (Katz et al., 1973), and regulate unpleasant emotions (Kubey, 1986). However, escapism is a highly complicated concept that involves various external and internal factors.

Escapism and binge watching. Similar to other bingeing activities, binge watching is believed to be a way to escape from reality in order to gain temporary psychological comfort

(Greene & Maggs, 2017; Heatherton & Baumeister, 1991), and Pena (2015) claims that the gratification of escapism is one of the primary motivations of binge watching. Matrix (2014) further discovered that young viewers reported escapist pleasure that was rooted in a sense of inspiration. Younger viewers who engaged in escapist viewing also were found to gain aspirational maturity and a feeling of “closing off the here-and-now and sinking into another world” (Morse, 1998, p. 193).

Escapist media consumers were able to gain a sense of liberty and separation from temporarily engaging with a character and story (Batat & Wohlfeil, 2009). Jones, Cronin & Piacentini (2018) suggested that escapism in binge watching was unique due to its “existential nature” (p. 498), as binge watching was a way for viewers to fill in gaps and search for answers from their own world. Hence, escapism in binge watching contains abundant elements and implications in psychology, and behavioral science beyond the scope of media studies (Tukachinsky & Eyal, 2018; De Feijter et al., 2016).

Because binge watching research is still at a preliminary stage, not many studies on this subject have focused on escapism as well as its related psychological effects. Though binge watching has been confirmed as a coping mechanism to regulate emotions (Whang, Lee, & Chang, 2003), there is still a gap in the literature about how this new form of media binging is formed. Many scholars have identified escapism as a motivation or gratification of binge watching; however, no studies have currently researched why escapism would lead to binge watching, or vice versa. This study will probe into the external factors, including stress and negative life events, as well as internal variables such as personal traits and negative affect as needs for escapism, and explore the reason why escapism shapes binge watching into an emotional habit (Rubenking & Bracken, 2018).

There are many motivations and reasons that might lead to escapist activities. Other than one's social situation, psychological conditions independent of social situation can also trigger escapist behaviors. In a television consumption study, Kubey (1986) pointed out that "television is an activity likely to be chosen by people wishing to escape from negative feelings and from the demands of reality" (p. 110). Kubey (1986) also found that individuality, independent of social setting, is a strong motivator and that people engage in escapist TV consumption based on how bad they feel. Kubey (1986) believed that the concept of bad "affect" and "alienation from self" (p. 116-117) were significant indicators of escapist activities. Building on Kubey's (1986) research, Henning and Vorder (1992) discovered that in addition to psychological and social factors, which include affect and life satisfaction, the need for cognition is a strong predictor for escapist TV consumption.

Although escapism is practiced as a common coping mechanism (Aldwin & Revenson, 1986), it is a complicated concept. Therefore, to better understand escapism and binge watching, one needs to comprehend how coping mechanisms work.

Stress, Coping, and Media Coping Mechanisms

Besides what research has shown about the detrimental effects of excessive television watching, binge watching may indicate addictive behavior tendencies in viewers, depending on whether or not the binge watching is intentional (Riddle et al., 2017). The ways in which people choose to use media as an outlet or as a coping mechanism for stress are varied, but it is clear that since televisions entered into private homes, people have used the activity of watching television, including binge watching, to cope with stress (Lee & Lee, 1995).

Television as coping mechanism. Much academic research has been done across many fields in an attempt to understand the relationship between television viewing and stress coping

mechanisms. More recent research indicates that viewing television as a coping strategy for stress may be effective if the stress is related to factors outside the subject's direct control, but it may hinder positive stress processing if the source of stress is internal or in a small sphere of influence (Anderson, Collins, Schmitt, & Smith, 1996). Studies within the past decade have shown that compared to people who did not have stress or anxiety issues, subjects in dysphoric states are more likely to engage in a night of heavy television viewing in order to cope with the stress or anxiety they are experiencing (Kubey & Csikszentmihalyi, 1990). McIlwraith (1998) had similar findings in that "self-reported TV addicts were significantly more likely than other viewers to report that they used television to distract them from dysphoric moods" (p.20). Other work has also demonstrated that "the people most satisfied with television entertainment are those with higher levels of stress and anxiety" (Kubey, 1986, p. 110).

There are many different ways in which stress manifests itself from person to person, and the ways in which people choose to cope with stress are also highly individual. However, from decades of studies about the effects of stress and various coping mechanisms, there are patterns that have emerged in the research. One of the most prevalent coping mechanisms is to use television as an escape from the pressures of the real world (Conway & Robin, 1991).

Television as a coping mechanism works for many different types of people, as television provides such a variety of content—those who need to escape from their stress can find more high-intensity programming, while more relaxing programming is perfect for those wishing to temporarily erase their hectic lives (Bryant & Zillmann, 1984).

While the research is clear that many people watch television as a means to relieve or escape from their stress, there are other coping mechanisms besides television watching that people can turn to. In fact, Kubey (1986) explained that, in some cases, television watching as a

stress coping mechanism could be comparable to that of using alcohol or drugs for the same reason. Similar to other coping mechanisms, addiction to television or other forms of media may result in more anxiety, worry, and stress (McIlwraith, 1998).

Bingeing as coping mechanism. Much psychological and health research has been performed to examine the link between stress and engaging in binge behavior. Often, the studies revolve around binge eating and binge drinking. The reasons why people choose to engage in binge behavior as a coping mechanism are varied, but they all revolve around their attempts to escape or alleviate stress. Indeed, people sometimes feel a temporary alleviation of their stress as they engage in binge behavior (Sulkowski, Dempsey, & Dempsey, 2011). However, those who report higher stress levels, or a greater number of stressors, are more likely to engage in binge behavior (McCaul, Hutton, Stephens, Xu, & Wand, 2017).

Television binge watching as coping mechanism. Based on the existing research about stress coping mechanisms, television watching as a stress coping mechanism, and bingeing behaviors in general, the link between stress and binge watching can be presumed. However, there is very little academic research linking the stress and binge watching directly.

Pena (2015) examined stress relief and social gratifications sought and earned from binge watching and found that binge-watching gratification is best obtained as an escape in which viewers temporarily forget their lives. This reinforces an earlier study in which the idea of viewing television at all was to escape (Kubey, 1986). Early studies on the effects of television found that “it is doubtful whether television propels its escape viewers into a euphoria; more likely they use it simply to forget for intermittent and brief times their troubles and worries” (Pearlin, 1959, p. 256).

Closely connected to the escape gratification of binge-watching, avoidance behavior is when users engage in binge-watching to put off any responsibilities that may be nagging (Anderson, Collins, Schmitt, & Smith, 1996), but as Pearlin (1959) indicates, this avoidance behavior is only a temporary fix. In the case of binge watching, the effects can be assumed to be similar to those of both television binging and general binging behavior. Pittman and Sheehan (2015) indicated that engaging in binge watching is restorative for viewers, as they are able to follow complex plots and characters, and find resolution within a world separate from their realities.

Younger audiences may be particularly inclined to engage in binge-watching behavior. Jenner (2017) states that the young, affluent middle class is very likely to engage in binge-watching because video streaming companies, such as Netflix and Hulu, “rely on audiences who can afford not only to subscribe and continue their subscriptions, but also own the technology needed to consume it, such as computers, tablets or smartphones and a broadband internet connection” (p. 313). Another study focusing on university students found associations between binge watching behavior and scoring high in anxious attachment (fear of abandonment and preoccupation with closeness in relationships), as well as scoring high in depression (Wheeler, 2015). Lastly, Jacobsen and Forste (2011) found that students’ usage of media is correlated with distractions from academic studies, but may increase satisfaction and development of social networks.

While it is important to recognize binge watching as a coping mechanism, in order to thoroughly understand this complicated behavior, one must also examine what personal attributes contribute to binge watching. Self-control, as it is widely related to many addictions and bingeing activities, is among one of the most important factors.

Self-Control, Media, and Binging Activities

What is self-control? Baumeister, Vohs, and Tice (2007) defined self-control as “one’s capacity for altering one’s own responses, especially to bring them into line with standards such as ideals, values, morals and social expectations, and to support the pursuit of long-term goals” (p. 351). The definition of self-control stressed that self-control is a capability that allows people to achieve long-term goals. Baumeister et al. (2007) also pointed out that self-control is different from self-regulation, as the former “enables a person to restrain or override one response, thereby making a different response possible” (p. 351). Self-control is not only an important human function (Muraven, Tice, & Baumeister, 1998), but it also serves as a broad indication for various behavioral patterns (Wegner & Pennebaker, 1993). Since self-control bears critical association with a large range of domains, such as crime (Gottfredson & Hirschi, 1990), internet addiction (Chak & Leung, 2004), academic performance (Duckworth & Seligman, 2005) and sexuality (Hernandez & DiClemente, 1992), it stands to reason that it can also affect an individual’s choices and behaviors—especially relating to yielding to temptation.

As self-control helps individuals better achieve the optimal fit between self and world (Rothbaum, Weisz, & Snyder, 1982), having a high level of self-control is positively related with success in various aspects of life. For example, Kelly and Conley (1987) found that self-control could contribute to marital satisfaction, as divorce rates were lower for men with better self-control. Self-control also plays a positive role in academic success. Children who could better control themselves tended to have a calmer personality and achieved higher SAT scores when compared with children who had lower self-control (Shoda, Mischel, & Peake, 1990). In the area of personal health, self-control is also important: Crescioni et al. (2011) discovered that self-control predicts positive health behaviors and success in weight loss.

Consequences of self-control failure. Self-control failure has significantly negative personal and societal consequences (Baumeister, Heatherton, & Tice, 1994). Aggression (Baumeister, Heatherton & Tice, 1993), obsessive thoughts (Martin & Tesser, 1996), and depression (Beck, 1991) are common misbehaviors associated with failure of self-control. At the societal level, lower self-control leads to higher chances for criminal conduct (Gottfredson & Hirschi, 1990). Schreck (1999) proposed that low self-control is the reason that “offenders are at high risk of being victims of crime” (p.633).

Why self-control may fail. Self-control failure is described as “regulation deletion” in the strength model (Muraven, Tice & Baumeister, 1998, p. 774), meaning that the central reason why self-control may fail is that people have limited capacity for self-regulation followed by a period of diminished capacity. As a result, self-control is weakened and impaired when an individual incessantly exercises self-control without rest in a way similar to how a muscle gets fatigued through long period of exercise (Muraven et al., 1998; Muraven & Baumeister, 2000). Subsequent empirical studies have confirmed that self-regulation impairs self-control efforts (Vohs & Heatherton, 2000). Controlling behaviors, such as suppressing thoughts or emotions and resisting temptations, result in impaired self-control capabilities (Baumeister et al., 2007).

The strength model was not the only explanation for self-control failures. Maphet and Miller (1982) have also noted that conflicts in goals could undermine self-control, as the behavior of children was less consistent when two adults gave conflicting rules and instructions. Baumeister et al. (1994) identified that emotional distress weakened self-control. This theory was confirmed by Tice, Bratslavsky, and Baumeister’s (2001) research, which found that participants’ self-control was lowered when they were experiencing sad emotional states.

Although reasons why self-control may fail vary, understanding self-control failure not only helps understand what jeopardizes personal development and societal well-being but also helps comprehend why self-control leads to impulsive behaviors and media addiction, which are critical to understand binge watching behavior.

Self-control and media addiction. Self-control is also associated with harmful media consumption (Khang Kim, & Kim, 2013; Kim, Namkoong, Ku, & Kim, 2008), especially internet addiction (Chak & Leung, 2004). Internet addiction was brought into the academic lexicon when Goldberg (1996) first used the term “the internet addiction disorder” (p.1) to describe people with problematic internet use. Studies since then have established connections among internet addiction, behavioral and health concerns. Those negative impacts include decreased sleep quality (Chen & Gau, 2016), dysfunctional social behavior (Whang et al., 2003), and higher chances of developing mental illnesses (Young & Rogers, 1998).

LaRose, Lin, and Eastin (2003) explained that internet addiction, as a form of unregulated internet use, is an extreme behavior on the continuum of internet activity that “extends from normally impulsive media consumption patterns” (p. 225). Through a study on college students, LaRose et al. (2003) concluded that internet addiction is a product of deficient self-regulation.

However, empirical studies have conflicting results when attempting to confirm the relationship between self-control and media addiction. Khang et al., (2013) pointed out that self-control is the most significant factor for media addiction. Chak and Leung (2004) discovered that self-control in fact played a mediating role in forming internet addiction. However, Mehroof and Griffiths (2010) could not find a significant relationship between online game addiction and self-control.

As addiction is a highly complicated physical and neurological behavior (Leshner, 1997), the exact impact that self-control has on forming addiction is still unclear. Yet, thoroughly understanding self-control would help one better understand other unhealthy and even pathological habits and behaviors, such as bingeing, that self-control might play a role in.

Self-control and bingeing activity. Bingeing is one type of activity where people experience a loss of control (Wechsler & Nelson, 2001). Among all bingeing activities, the most researched bingeing disorder is binge eating disorder. From understanding binge eating disorder, we can better comprehend how self-control shapes the formation of bingeing activities.

Binge eating is defined as “consuming a large amount of food in a short period of time while also experiencing a loss of control over eating” (American Psychiatric Association, 2013, p. 133). Because loss of control is a commonly experienced feeling in binge eating, many researchers have explored the question of why people lose control, and especially self-control over eating. Researchers theorize, via the resource depletion model (Vohs & Heatherton, 2000), that the depletion of self-control leads to binge eating behavior (De Ridder & Lensvelt-Mulders, 2018; Loth, Goldschmidt, Wonderlich, Lavender, Neumark-Sztainer, & Vohs, 2016). Vohs and Heatherton (2000) proposed that resources, such as self-control, become depleted after overuse. As a result, when self-control becomes depleted after practicing self-control activities, a person’s ability to exert further self-control can be impaired, leading to declining performance in future activities that require self-control. Depletion is also confirmed to lead to increased food or energy intake (Hofmann, Rauch & Gawronski, 2007). Despite theoretical relevance between self-control and binge eating, this model has not been fully studied in application to binge eating. Pearson et al. (2018) provided the first empirical study of people with obesity to confirm the positive relationship between self-control depletion and the likelihood of engaging in binge

eating. Although there is limited research on the direct relationship between self-control and binge eating, Jansen, Broekmate, and Heymans (1992) still found that increasing self-control could better prevent binge eating disorder.

The role of self-control could also be extended to other bingeing activities, including binge drinking. Piquero, Gibson, and Tibbetts (2002) further discovered that low self-control is a significant predictor for binge drinking; however, low self-control is not fully accountable for this maladaptive activity. Self-control should be considered along with other factors such as age and stress (Grzywacz & Almeida, 2008), and social group (Weitzman, Nelson, & Wechsler, 2003) to fully assess this type of bingeing activity. Although empirical studies have conflicting results on how self-control affects binge drinking behavior, understanding self-control would help researchers fully comprehend how other bingeing activities, especially binge watching affects people.

Self-control and binge watching. Because binge watching is a relatively new area of study, there are currently no quantitative studies that have focused on the association between binge watching and self-control. The studies that examined the role of self-control on binge watching are all qualitative ones. Through the use of in-depth interviews, De Feijter et al. (2016) reported that participants identified lack of self-control as an important factor leading to their binge watching habit. Flayelle, Maurage, & Billieux (2017) also discovered a similar pattern in their focus group study that self-control failure is a commonly recognized cause for binge watching. Since there is a lack of quantitative research on the role of self-control on binge watching, the following study aims to fill this gap.

Research Questions

Binge watching could function as a coping mechanism; however, the choice to engage in binge-watching behavior stems from vast and varied motivations, and it depends greatly on the gratifications sought by individuals. Based on existing media-effects research focusing on television and new online streaming technology, and what has been reviewed on escapism, stress, and self-control, as well as the research on bingeing as a coping mechanism, the current study predicts that stress and self-control will determine the gratifications sought from binge watching, and, as such, the following hypotheses are proposed (see Figure 1) for a visual depiction of these.

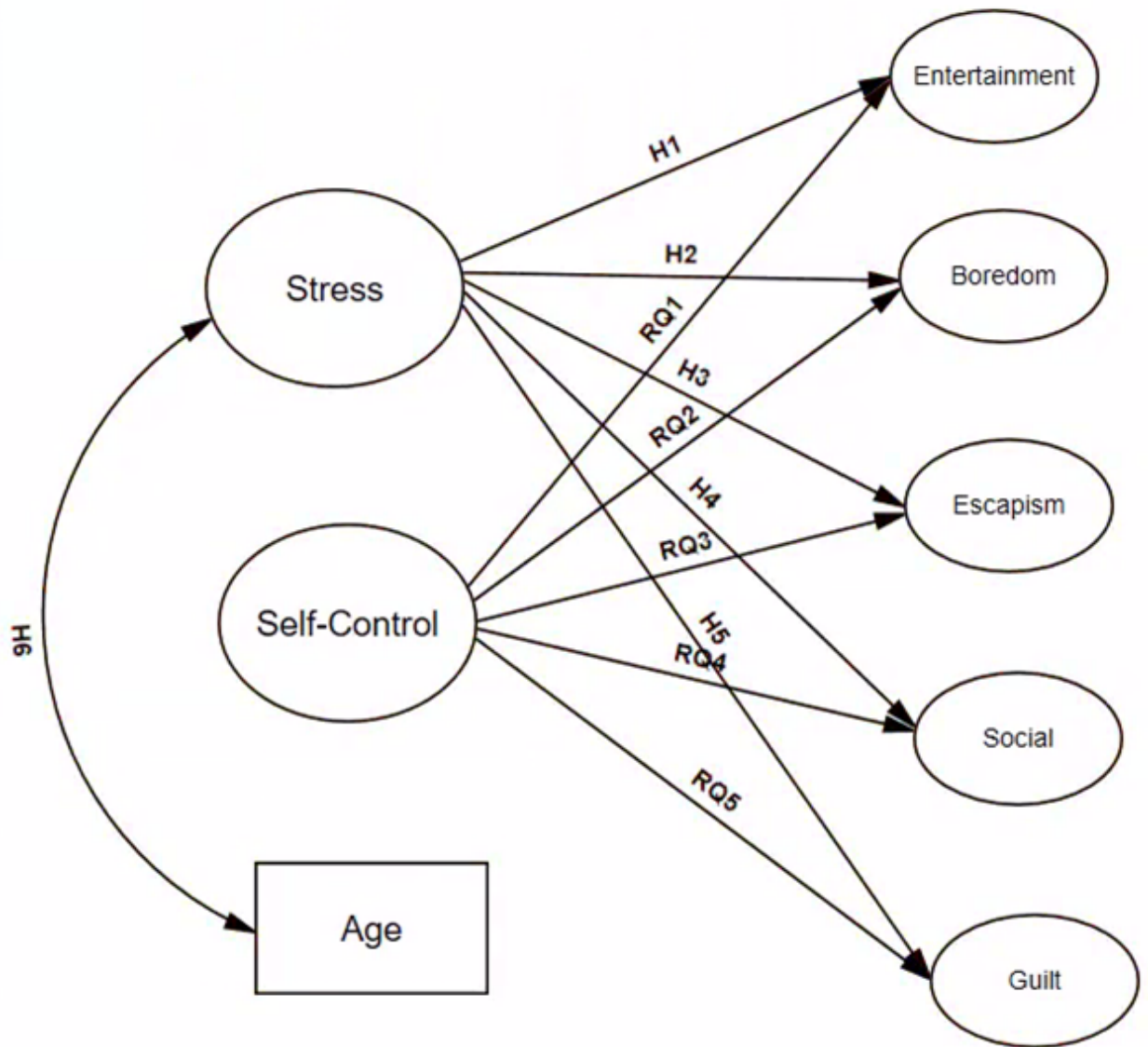


Figure 1 A Visual Depiction of Research Questions and Hypotheses

H1: The more stress individuals have, the more likely that they use binge watching to seek entertainment.

H2: A higher stress level leads to higher boredom from binge watching.

H3: Stress level is positively associated with using binge watching to escape or avoid.

H4: Stress level is positively associated with a higher likelihood to binge watch to socialize.

H5: Stress level is positively associated with feeling guilty from binge watching.

H6: Age is correlated with stress.

RQ1: Self-control is positively related to gratification of seeking entertainment.

RQ2: Self-control is negatively related to gratification of seeking boredom.

RQ3: Self-control is negatively related to using binge watching to avoid or escape.

RQ4: Self-control is positively related to the gratification of seeking social benefits.

RQ5: Self-control is positively related to feeling guilty from binge watching.

Methods

To gain a deeper understanding of the relatively new, yet complicated, media habit of binge watching, Structural Equation Modeling (SEM) was performed to examine the relationships between stress and the previously noted binge watching gratifications of entertainment, socialization, boredom, escape, and guilt.

SEM is a combination of factor analysis and regression analysis and is particularly suitable for this study because the emotional attributes and gratifications of binge watching and the proposed relationships between these variables can be accurately quantified and visually portrayed using this method (Muthén & Asparouhoy, 2012).

Because the researcher is interested in investigating whether stress level affects certain binge watching gratifications, especially escapism, an SEM model would depict the pathway of how stress leads to different binge watching gratifications.

Design

Social media was used to recruit participants for this study using a snowball sampling technique. The study was carried out from April 11 to April 18, 2019, after approval by the Internal Review Board of Brigham Young University. The survey (see Appendix) was distributed through the researcher's Facebook and Instagram posts as well as reposts from friends who saw the post, ultimately achieving a snowball effect to amass survey respondents.

Sample

A convenience sample of 212 respondents was collected. People who had binge watched in the past month were selected as qualified participants. Accordingly, 157 participants fully completed the survey and their qualified responses were analyzed.

Variable Measurements

Stress level was measured with the Perceived Stress Scale (PSS), a commonly employed psychological instrument for measuring the perception of stress (Cohen, 1994). Items assessing feelings and thoughts were designed to assess how “unpredictable, and overloaded respondents find their lives to be” with “a number of direct queries about current levels of experienced stress during [the] last month” (Cohen, Kamarck, & Mermelstein, 1994, p. 422). Using six points from 0 (never) to 5 (often), respondents were asked to rate their levels of perceived stress. Questions extracted from the PSS asked how often in the past month the participants could not cope with all the things that they had to do, felt difficulties piling so high that they could not overcome them, felt on top of things, and were unable to control the important things in their lives.

Self-control ability was evaluated with five items scaled 1 (strongly disagree) to 5 (strongly agree) by Walton-Pattison et al. (2018). The participants were asked to rate themselves on statements stemming from the phrase: “I am confident that I can stop myself from watching

more than two episodes of the same TV show,” followed by the items “if I wanted to,” “even when I have a lot of time,” “even when I am bored,” “even when it is late at night,” and “even when I am watching TV with someone else.”

Binge Watching Gratifications and Outcomes

Rubin (1983) identified nine different motivations for television consumption. Among the nine identified motives, entertainment, social interaction, escape, and boredom were selected for binge watching gratifications. Questions and scales were adapted from a study by Papacharissi and Mendelson (2007) that could best reflect the statements of subjects. The five-point scale spanned from (1) “strongly disagree” to (5) “strongly agree.” Questions to measure binge-watching gratifications are summarized in Table 5 of factor loadings.

Anticipated regret and guilt were added as both gratifications and outcomes of binge-watching. They were measured with two items adapted from O’Carroll, Chambers, Brownlee, Libby & Steele (2015)’s study on a five-item Likert Scale (1 = strongly disagree through 5 = strongly agree). Respondents answered the following two items: “After binge watching, I feel regret,” and “After binge watching, I later wish that I had not.”

Demographic and miscellaneous information, including respondents’ age, gender, binge-watching device, and binge-watching conditions, were collected at the end of the survey.

Data Analysis

The analysis was conducted in two stages. First, the dimensional structure of the stress level assessment and self-control assessment was examined with confirmatory factor analysis (CFA) using Bayesian estimation. Second, a structural equation model was specified with the Bayesian estimation (BSEM), in which gratifications of binge watching were specified as

dependent variables while stress level, age, and self-control were specified as covariates (see Figure 1 without non-significant covariates).

The Bayesian approach has been widely recommended due to its fundamental advantages, including its flexibility with a small sample (Muthén & Asparouhoy, 2012). The model fit of the posterior predictive p-value (ppp) implies a good fit when $ppp > 0.05$. All the modeling and analyses were conducted using Mplus (v8). The results reported in this study are the median parameter estimates together with their lower and upper limits of the 95% credibility interval. As no informative prior distributions were specified, Mplus uses the maximum likelihood estimates as the priors.

Results

Participants

Of the 212 survey respondents, 177 (87.6%) had engaged in binge watching activity in the past month. Among the 157 respondents who completed surveys in their entirety, 127 were women (80.9%) and 30 (19.1%) were men. The average age of respondents was 28.6 (SD=9.4).

The descriptive statistics showed that 34 (28.7%) participants reported binge watching any time before or after stressful events; 71 (45.2%) on weekdays during the regular semester or during work; 40 (25.5%) on weekends of the regular semester or during work; however, only 12 (7.6%) did it during a holiday or break.

Television ($n=89$, 56.7%) was still the major device that participants binge watched, followed by computer or laptop ($n=45$, 28.7%), smart phone ($n=14$, 8.9%), and tablet ($n=9$, 5.7%).

Bayesian CFA

Table 1 demonstrates the factor structure for the variables of stress level, self-control, and binge-watching gratifications (guilt and regret, entertainment, escape, boredom, and socialization), as well as credibility intervals of the factor loadings. The CFA indicated that stress level, self-control, and binge watching gratifications were measured well. A *ppp* greater than 0.05 indicates an acceptable fit. The model fit the data well (*ppp* = 0.083) and the fit is acceptable. Standardized factor loadings and their 95% credibility intervals are listed in Table 1.

Construct	Item Content	Factor Loading	Lower Limit	Upper Limit	Dimension
Stress	S0: Felt nervous/stressed	0.61	0.51	0.71	Stress
	S1: Had Inability to control	0.83	0.75	0.89	
	S2: Feel on top of things	0.81	0.72	0.88	
	S3: Had inability to cope with things	-0.7	-0.77	-0.59	
Self-Control	SC1: I can stop binge watching if I wanted to	0.87	0.79	0.92	Self-Control
	SC2: I could stop binge watching even I had time	0.81	0.68	0.9	
	SC3: I could stop binge watching if I was bored	0.75	0.63	0.84	
	SC4: I could stop binge watching when it was late	0.77	0.64	0.85	
	SC5: I could stop binge watching when with friends	0.45	0.28	0.92	
Guilt & Regret	G1: I felt regret	0.9	0.83	0.94	
	G2: I wish I had not done it	0.94	0.9	0.97	
Entertainment	E1: The content was entertaining	0.4	0.32	0.51	Binge Watching Gratifications
	E2: More interesting to watch TV this way	0.78	0.67	0.86	
	E3: I wanted to better engage with character	0.88	0.8	0.93	
	E4: I wanted to better follow with storyline	0.85	0.76	0.91	
Escape	A1: To escape from current issues	0.91	0.85	0.95	
	A2: To not to think about problems temporarily	0.95	0.91	0.97	
	A3: To avoid doing the job I was supposed to do	0.89	0.82	0.94	
Boredom	B1: There is content just there for me to watch	0.63	0.47	0.77	
	B2: I wanted to occupy time	0.66	0.44	0.83	
Social	SOC1: To talk to other about it	0.57	0.43	0.68	
	SOC2: I did not want to be alone	-0.11	-0.32	0.1	

Table 1 Standardized Factor Loadings of the CFA using Bayesian Estimation

Bayesian SEM

The full BSEM fit the data acceptably, with *ppp* = .063. Figure 1 depicts the relationship between stress, self-control, and binge-watching gratifications, while controlling for the variable of age.

Stress was positively related to avoid and escape ($\beta = -.58, p < .01, 95\% \text{ CI } [.39, .74]$), guilt and regret ($\beta = .34, p < .01, 95\% \text{ CI } [.13, .53]$), and socialization ($\beta = .57, p < .01, 95\% \text{ CI } [.23, .83]$). Age was negatively related to guilt ($\beta = -.19, p < .01, 95\% \text{ CI } [-.33, -.072]$), but positively associated with boredom ($\beta = .19, p < .05, 95\% \text{ CI } [.016, .35]$). Surprisingly, self-control was not statistically significantly related to any variables. The path analysis is demonstrated in Figure 2.

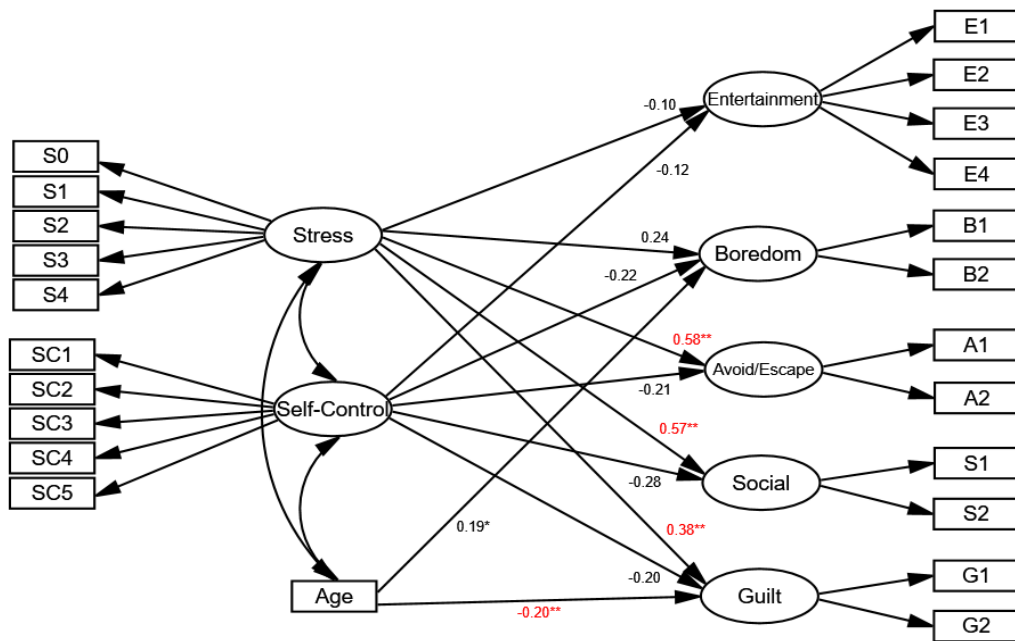


Figure 2 Effects of Stress and Self-Control on Binge Watching Gratifications

Discussion

Survey Demographics

The data shows that binge watching is practiced by both genders and by people across the age range (age 18 to 74) of the current study. The findings of the current study indicate that age is an important factor that affects gratifications of binge watching. This study found that older individuals are more likely to engage in binge-watching behavior in order to alleviate boredom.

However, older age is also negatively related with guilt, indicating that older people are less likely to feel guilty from binge watching. Future research is needed to understand the reasons behind these results, especially why binge watching affects people in different age groups and that the reason why age is negatively related to the feeling of guilt.

Negative Outcomes

The data from the SEM analysis indicates that there are negative outcomes and feelings associated with binge watching for people with a relatively high self-reported stress level. This result confirms with Kubey's (1986) prediction that people with higher levels of stress and anxiety tended to watch television for entertainment. It also validates Kubey and Csikszentmihalyi's (1990) finding that individuals in dysphoric states were more likely to engage in heavy television watching to cope with stress.

Differences Between Traditional Television Viewing and Binge Watching

Although both traditional television viewing and binge watching serve a fundamental role of relieving stress and seeking relaxation, it is interesting to note that binge watching bears significant differences from traditional television watching. Future researchers should bear in mind the unique distinctions, but should not completely separate the psychological or emotional reasons for binge watching from those for traditional television viewing. Traditional television watching studies should still be the foundation for binge watching studies.

It is also important to note that Anderson et al., (1996) found that television watching was a coping mechanism only if the stress was internal. Since Anderson et al. (1996) pointed out that external and internal stress had different effects on the coping mechanism of television watching, future studies should further divide different causes of stress, and investigate if internal and external stress both lead to the same gratifications of binge watching.

Internal or External Factors

It is also important to understand that, although negative consequences and feelings were associated with binge watching, binge watching does not necessarily generate the same level of harmful effect for every binge watcher who had a relatively higher stress level. Flayelle et al. (2019) distinguished healthy binge watchers from problematic binge watchers and discovered that because the influences of different types of binge watchers are different, the uniqueness and individuality of binge watching needs to be carefully addressed. More importantly, different personal factors, including binge watching motivation, location, and frequency, need to be integrated into analyzing this complicated activity. Therefore, gratifications and consequences associated with different external or internal factors need to be studied separately.

In opposition to the findings of Sung et al. (2018), this study indicates that individuals with high levels of stress did not achieve the gratifications of relaxation, social interaction, and entertainment from binge watching. Rather, the consequences of binge watching were quite negative and included feelings of guilt and regret. Possible explanation might be that when the negative feelings of guilt and regret are high, they might overwhelm binge watchers, canceling out the positive gratifications, which include achieving relaxation and entertainment.

Associated Emotions

This study also sheds a light on Rubenking and Bracken's (2018) conclusion that binge watching is a highly emotional activity. According to this study, binge watchers not only obtain social functions, but also they feel intense emotions, such as guilt and regret, from engaging in binge watching. Binge watching becomes more than an activity in which users seek those traditional gratifications identified by Blumler & Gurevitch (1973); users binge watch to fulfil emotional needs that traditional television viewing cannot. Binge watching also offers people a

temporary shelter from their current stress and issues. Future studies should delve deeper into how binge watching is an escapist approach, especially for those with higher stress levels.

Future research should also look deeper into the reasons why binge watching may cause regret and guilt. According to Walton-Pattison et al. (2018), binge watching caused anticipated regret and goal conflict, resulting in feelings of guilt for binge watchers. Individuals' regret and guilt might also come from other factors related to the activity of binge-watching, such as impaired sleep quality and decreased efficiency the following day, which was confirmed in the research by Exelmans and Van den Bulck (2017).

Coping Mechanism and Escapism

This study shows that people used binge watching as an avoidance coping mechanism for stress, which result supports theories in the existing literature about gratifications sought in regular television viewing (Bryant & Zillman, 1984). Binge watching as a coping mechanism is a finding that no previous literature has uncovered due to the dearth of literature on this topic. Other literature, however, does examine the choices of individuals to engage with other media as an avoidance coping mechanism (Sulkowski, Dempsey, & Dempsey, 2011).

As in other forms of media-as-a-coping-mechanism, this study does find that binge watching temporarily alleviates stress (Sulkowski, Dempsey, & Dempsey, 2011). Although the immediate gratifications of binge watching can be tempting, binge watching is not able to solve existing problems nor reduce stress fundamentally. In the long run, avoidance behavior and escapism as coping mechanisms tend to add more stress to individuals (Pearlin, 1959). Therefore, as in previous research, this study finds that the overall effectiveness of binge watching does not provide lasting stress reduction. Instead, it forms a vicious cycle of stress, avoidance, and more stress because of the avoidance.

Binge watching functions as an escapist coping function for individuals with higher level of stress because engaging in binge watching shelters people from unpleasant realities that they do not want to face (Kubey, 1986). Although this is an interesting finding, future researchers should still distinguish the degree of escapism practiced by different binge watchers. Different levels of escapism would cause different effects and influences on binge watchers' lives. Binge watching is a general and broad term; but it is composed of a wide range of behaviors. Binge watching three episodes in one setting, although fits the definition of binge watching, is vastly different than ones who binge watch all night long. Therefore, it is critical for future researchers to not only distinguish different levels of escapism or avoidance used by binge watchers, but also distinguish different degrees of binge watching.

Self-Control

An unexpected finding of this study is that the trait of self-control had no significant effect on binge-watching gratifications. This result contradicted the findings of Feijter et al. (2016) that lack of self-control is an important factor leading to binge watching. The difference might come from differences in methodologies. While Feijter et al. (2016) conducted an in-depth interview to ask interviewees to self-reflect about why they engaged in binge watching, this study is a quantitative study that assesses the effect of self-control on binge watching gratifications. Respondents might believe that self-control and binge watching were associated; however, from quantitatively modeling self-control into gratifications and feelings gained from binge watching, those two factors, self-control and binge watching gratifications were not statistically related. This study reminds us that the degree of self-control might have minimal influence on gratifications sought from binge watching and that self-responses might not be reliable enough to fully understand this highly complex behavior. For future studies, researchers could start from

quantitative studies to understand what elements or behaviors constitute binge watching and then use qualitative studies to comprehend why binge watchers behave a certain way. Because binge watching is different from traditional television watching, a mixed method might be useful for understanding this media habit (Rubenking & Bracken, 2018).

According to previous studies on the relationship between self-control and bingeing activities, the finding that self-control is unrelated to binge watching gratifications is not surprising. Although self-control is directly related to academic success, personal health, and marital satisfaction, its role in bingeing activities is still unknown. According to the resource depletion model (Vohs & Heatherton, 2000), deletion of self-control should lead to bingeing activity. However, this study does not support the theory. Possible reasons might be that binge watchers might purposefully choose to binge watch to seek escapism or that self-control is not involved or needed for this activity. The results of this study also confirmed the claim from the Piquero, Gibson and Tibbetts (2002) study that self-control is not fully accountable for bingeing activities but needs to be studied together with other factors.

Even though the association between self-control and binge watching conflicts in empirical studies, it does not suggest that researchers should not investigate self-control. However, this finding calls for a more thorough understanding of self-control and binge watching behavior. In this study, the author only considered how self-control and stress affect binge watching gratifications. The takeaway is that self-control as a highly complicated mechanism should not be investigated separately when studying its relationship with binge watching. Future research should explore other combinations, such as how personality, lifestyle, time management skills, and mental health state, along with self-control, play a role in shaping binge watching behavior.

New Technology

The findings of this study also indicate that new technologies, such as online streaming, may make people susceptible to addictive and repetitive viewings, making binge watching more ubiquitous in modern society. Future researchers could study the additive attributes of this new technology, investigating if technologies, including online streaming and on-demand videos make people more susceptible to addictive or repetitive behaviors. An interesting research question that future researchers could ask is that whether it is the weakness in emotion management and self-control, or new features in technology, such as the automatic play function installed by online streaming companies make people susceptible to binge watching.

The data from this study found that there is a link between feeling stressed and using binge watching as a coping mechanism. Additionally, those individuals, especially those who do engage in binge-watching behavior to cope with stress or to escape from problems, often feel guilt and regret. Therefore, stressed individuals should exercise caution and seek other coping mechanisms in order to reduce stress. Because of the prevalence of binge watching in modern society, the negative effects of this behavior should continue to be a topic for future researchers.

Limitations

Limitations of this study include the self-reporting mechanism for the study, the timing of the study, the sample size and demographics of the study, and the combination of regret and guilt into one variable. The largest limitation of this study is the self-reporting mechanism through which the researcher gathered the data. Future researchers may establish more objective and consistent measures to accurately evaluate those variables that measure respondents' emotions and feelings towards binge watching.

Additionally, the timing of the survey may have affected the results. The survey was taken by many university or graduate students in the weeks immediately preceding finals, which may have led to a significantly increased level of self-reported stress and engagement in binge-watching behavior. Future studies should consider the effects of different stressors on respondents' choice to engage in binge-watching behavior.

The small sample size and the demographics are other limitations of this study. The sample size was small; as a result it might not be able to reflect the population very objectively. Future researchers should aim for a larger sample size. In addition, the survey was distributed around the researcher's social network therefore; the diversity of population was impaired. Future researchers should obtain a larger sample that covers diversified demographics. To better assess the effects of binge watching, future researchers may also study the roles that gender, age, race, and socioeconomic status play in binge-watching effects.

This study also had limitations in the results analysis, since regret and guilt were combined into one variable. Because regret and guilt are different emotions, they might affect binge watchers differently. Future researchers should separate these two emotions and construct more detailed and accurate measures.

Conclusion

The current study aims to fill a gap in the research surrounding the practice of binge watching. Much research has already been done on the stress-coping gratifications sought from Internet usage, television watching, and bingeing behaviors, but there is relatively little research connecting all three of these activities. This study is a small first step to provide meaningful data indicating that individuals do engage in binge-watching behavior as an attempt to cope with their stress. Engaging in binge watching as a stress-coping mechanism may lead individuals to

temporary alleviate their stress, but it ultimately leaves them feeling guilty and regretful. For those who study binge watching activity, it is critical to understand that different motivations of binge watching could fundamentally shape different gratifications and consequences of binge watching behaviors.

It is also important for binge watchers to understand that escapism, especially in the form of binge watching, is not an effective solution to existing issues. Without establishing correct or healthy motivations, binge watching could be harmful. Every binge watcher is also different, and different types of binge watching need to be studied separately. The author of this study presents this research to encourage future researchers to explore the relatively unexplored phenomenon of binge watching and the effects that this behavior may have on individuals.

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Appendix

Survey Distributed to Respondents

Q1: In the past month, have you ever watched more than 2 episodes of the same show in one setting? (Y/N)

Q2: Recall your recent binge-watching experience—on what device do you usually watch TV shows?

Television

Tablet

Smartphone

Computer/Laptop

Q3. When do you usually binge-watch?

Weekend of regular semester/work

Weekday of regular semester/work

During break/holiday

Anytime before/after stressful events (exams, assignments, being sick, other conflicts, etc.)

Q4. Recall the recent month in which you binge-watched. How often did you feel nervous and/or stressed?

Never

Almost never

Sometimes

Fairly often

Very often

Q5. In the last month, how often have you felt difficulties were piling so high that you could not overcome them?

Never

Almost never

Sometimes

Fairly often

Very often

Q6. In the last month, how often have you felt that you were unable to control the important things in your life?

Never

Almost never

Sometimes

Fairly often

Very often

Q7. In the last month, how often have you felt that you were on top of things?

Never

Almost never

Sometimes

Fairly often

Very often

Q8. In the last month, how often have you found that you could not cope with all the things that you had to do?

Never

Almost never

Sometimes

Fairly often

Very often

Q9. Evaluate the following statement: "I am confident that I can stop myself from watching more than two episodes of the same TV show, if I wanted to."

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q10. Evaluate the following statement: "I am confident that I can stop myself from watching more than two episodes of the same TV show, even when I have a lot of time on my hands."

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q11. Evaluate the following statement: "I am confident that I can stop myself from watching more than two episodes of the same TV show, even when I am bored."

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q12. Evaluate the following statement: "I am confident that I can stop myself from watching more than two episodes of the same TV show, even when it is late at night."

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q13. Evaluate the following statement: “I am confident that I can stop myself from watching more than two episodes of the same TV show, even when I am watching TV with someone else.”

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q14. Evaluate the following statement: “Watching more than two episodes of the same TV show in the same sitting at my typical time and location is something I do without thinking.”

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q15. Evaluate the following statement: “Watching more than two episodes of the same TV show in the same sitting at my typical time and location is something I do purposefully to satisfy whatever needs that I have.”

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q16. Evaluate the following statement: “Watching more than two episodes of the same TV show in the same sitting at my typical time and location is something I do without realizing it and once I start, I find it difficult to stop.”

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q17. Evaluate the following statement: “Watching more than two episodes of the same TV show in the same sitting at my typical time and location is something I do without consciously remembering to do it.”

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q18. Evaluate the following statement: “Watching more than two episodes of the same TV show in the same sitting at my typical time and location is something I do automatically.”

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q19. What is your gender? (Male/Female/Prefer not to answer)

Q20. What is your age?

Q21. Evaluate the following statement: “After binge-watching, I feel regret.”

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q22. Evaluate the following statement: “After binge-watching, I later wish that I had not.”

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q23. Evaluate the following statement: “I binge-watch because it helps me to relax.”

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q24. Evaluate the following statement: “I binge-watch because it helps me to unwind.”

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q25. Evaluate the following statement: “I binge-watch because it helps me to rest.”

Strongly agree

Somewhat agree

Neither agree nor disagree

Somewhat disagree

Strongly disagree

Q26. Evaluate the following statement: “I binge-watch because it helps me to escape from my current problems.”

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q27. Evaluate the following statement: “I binge-watch because it helps me to not think about my problems or stress for that moment.”

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q28. Evaluate the following statement: “I binge-watch because I don’t want to think about my problems or do the job that I am supposed to do.”

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree