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Abstract

This study focuses on the expanding trend of marathon (“binge”) television viewing. It examines the personality antecedents of such media consumption (attachment style, depression, and self-regulation deficiency) as well as the psychological experiences of marathon viewers relative to the narrative (transportation, enjoyment) and its characters (parasocial relationship, identification). In a two-study design, theoretical models of media use and involvement, on the one hand, and models of media addiction, on the other hand, are applied to predict the extent of marathon viewing and to compare it with “traditional” viewing. Results advance understanding of enjoyment and involvement theory and support cognitive theories of media addiction. At the same time, the study’s findings reveal that marathon television viewers are active both cognitively and emotionally during and after the media exposure, thus alleviating some concerns about the “problematic” nature of the “binge” viewing phenomenon.

KEY WORDS: Television, Marathon viewing, Quantitative research methods, Enjoyment of media

The Psychology of Marathon Television Viewing: Antecedents and Viewer Involvement

As media technologies evolve, so do the patterns of entertainment media consumption. One contemporary trend, colloquially dubbed "binge watching," refers to "watching two to six episodes of the same television show in one sitting" (Conlin & Billings, 2015), but Conlin and Tefertiller (2016) promote a broader consideration of "high-dosage," continuous media consumption (p. 6). There is lack of consensus regarding the implications of this trend for media consumers. Some scholars adopt the binge metaphor, which – similar to binge eating and binge alcohol drinking – implies a sense of exaggeration, out of control-ness, and even addiction (e.g., Goldstein, 2013). Koblin (2016) suggested that binge-viewing may minimize the cultural "watercooler"-type conversation associated with traditionally-viewed television shows. Yet, others maintained that binge watching may be an active experience for viewers, one that involves greater control of both their viewing schedule and their emotional and cognitive experience with the content (Pang, 2014). It is because of this duality and the need to avoid the negative connotations associated with bingeing behaviors that this study adopts the term "marathon viewing," which implies "a conjoined triumph of commitment and stamina" (Perks, p. ix).

The current study adds to the limited empirical-based literature about marathon viewing by examining the broader process involved in this mode of viewing from two complementary theoretical perspectives. The first perspective that has been commonly applied to other forms of intense media consumption is rooted in the perception of excessive media use as a potentially problematic and even possibly addictive behavior, resulting from deficient self-regulation. The second approach applied in this research is grounded in media involvement theories, considering media audiences as actively engaged individuals and avoiding any negative assumptions about media use. This approach guides the examination of viewer reactions to and relationships with

the narratives and the mediated persona encountered during marathon viewing, which can serve as important motivations guiding media consumption. To examine the theoretical propositions, Study 1 considers these personality and media engagement variables in relation to media marathoning as a continuum (predicting the extent of “binge” viewing). Next, Study 2 examines marathoning as a categorical state (comparing “binge” and “traditional” viewing as two distinct experiences).

The Development and Implications of Marathon Viewing

The marathon exposure to episodes of a television series is enabled by contemporary technology which allows viewers control over viewing (e.g., Internet streaming) and by changes in content distribution strategies, such as the simultaneous, rather than episodic, release of all of a season's episodes as is done by Netflix (Giuffre, 2013). Consumption of multiple episodes in such a condensed manner is not an entirely new phenomenon (e.g., Rubin & Eyal, 2002) but the recent convenience and convergence of media technologies seems to provide an even greater sense of freedom from the constraints of traditional television scheduling (Perks, 2015). Indeed, Sung et al. (2015) recently classified 75% of their sample as marathon viewers. The socio-technological and economic forces, however, are unlikely to occur in a vacuum. Rather, they ostensibly exploit psychological characteristics and drives that draw media consumers to engage in media marathoning. Two approaches can be considered. First, the most commonly used model for examining intense media use builds on notions of addiction and deficiency. Second, a model of media engagement suggests that marathoning can be related to gratifications such as enjoyment and involvement.

A cognitive model of addiction. In line with the negative connotation of the term "binge, marathon television viewing is thought to involve addiction, including obsessive, excessive, and

dependency components (Horvath, 2004). Media addiction has been studied in a variety of contexts, including gaming, television viewing, and Internet use. Based on research on addiction in other domains, media researchers agree that to be considered “addictive” or “compulsive” several key criteria should be met (e.g., Horvath, 2004; LaRose et al., 2003): (a) heavy media consumption (with “heavy” being relative to each person’s “normal” levels, rather than absolute averages); (b) interference of media use with one’s normal activities, generating conflict and personal or social tensions; (c) a built tolerance so that consumers’ reward from the media activity is diminished, creating craving for more consumption; and (d) withdrawal symptoms when the media activity is terminated. Most researchers agree that addictive media use rarely meets the criteria for a clinical diagnosis. Nor do all intense or marathon media consumptions represent manifestations of addictive tendencies. Nonetheless, it is important to examine addiction as one set of possible psychological precursors for this mode of media consumption.

Other “binge” media behaviors have been posited to be associated with three key psychological problems: loneliness, social anxiety, and depression (Brechan & Kvalem, 2015; Tokunaga & Rains, 2010). In the context of television viewing, some studies have found that lonely people tend to turn to favorite television shows, which indeed elevates their loneliness (e.g., Derrick, Gabriel, & Hugenberg, 2009). The limited emerging literature on marathon viewing similarly seems to indicate that this form of viewing is associated with both depression and loneliness (Sung et al., 2015).

Second, excessive media use as an addiction has been theorized to be associated with social anxiety, broadly defined as discomfort in social interactions, ranging from shyness to a clinical disorder (see Tokunaga & Rains, 2010). Some studies addressed this construct by examining the relationship between media use and attachment style, which encompasses the

individuals' expectations of and ability to experience intimacy, dependency, and trust in relationships (Hazan & Shaver, 1987). Attachment styles are generally categorized into three main types: (a) secure attachment - ease of developing intimacy, great comfort and trust in the relationship; (b) avoidant attachment – difficulty in creating close, intimate, and trusting relationships; and (c) anxious attachment – a desire for strong relationships alongside difficulty in creating intimacy and trust. Several studies have linked addiction to media and technology with insecure attachment styles (e.g., Ghasempour & Mahmoodi-Aghdam, 2015; Kang, Park, Park, & Park, 2012; Kwan & Leung, 2017).

Finally, according to the social cognitive perspective of addiction (LaRose et al., 2003), similar to other "binge" behaviors such as compulsive eating, addictive media use can stem from deficient self-regulation. The model suggests that depressed individuals may choose to turn to media to disrupt their dysphoria. As the media do offer temporary relief, viewers learn to associate media use with rewards and develop a habit of using media to seek immediate gratification and avoid less pleasant states with a long-term payoff. Depression's suppression of self-regulation – reducing one's ability to control their behavior, to resist the temptation to continue engaging in an activity – has thus been theorized to play a key role in addiction formation (Bandura, 1991). The depression-self regulation hypothesis was tested by LaRose et al. in the context of Internet consumption, supporting the idea that depressive tendencies lead to self-regulation deficiency, which in turn predict formation of Internet use habits meant to relieve this condition, leading to an increased reliance on the Internet. The current study aims to test the depression-self regulation link from LaRose et al.'s (2003) model in the novel context of media marathoning.

To summarize, guided by theories of problematic media use that have been applied to

other forms of media consumption, the current study examines psychological correlates of marathon viewing. Following models of media addiction, it is hypothesized that:

H1: Depression, insecure attachment, and loneliness will be positively associated with extent of marathon viewing.

H2: Self-regulation deficiency will mediate the relationship between depression and marathon viewing.

Marathon television viewing and the audience member's active experience. The study also draws on an alternative perspective to the addiction model: the psychology and enjoyment of viewing literature. To this end, the study examines viewer involvement with the narrative's characters (parasocial relationship and identification with the characters), involvement with the narrative (transportation into the narrative), and enjoyment (hedonic and eudemonic). These outcomes can be viewed as gratifications, or emotional rewards, that draw viewers to marathon experiences (Green, 2004). That is, rather than being a product of audience passivity (addiction, inefficient self-regulation), marathoning can be a form of active audience engagement with media that maximizes enjoyment. For instance, viewers may feel that they are following the storyline from start to finish without interruption, as it is meant to be consumed (Conlin & Tefertiller, 2016; Sung et al., 2015). Cognitive involvement may also play a role in guiding marathon viewing; Murphy (2014) suggested that when the events of the previous episode are fresh in viewers' minds, it is easier to follow the plot and identify cues in the content. Thus, marathon viewing can enhance a number of forms of involvement and enjoyment.

Narrative-related involvement. *Transportation* refers to the experience of being immersed in a narrative, becoming engrossed in a fictional world (Green, 2004). Transportation encompasses an emotional involvement in the storyline and a cognitive aspect of mental rumination and perceived realism (Riddle, 2013). Conlin and Tefertiller (2016) found that

marathon television viewing was associated with greater transportation than reading a book or playing a video game. Conlin and Billings (2015) suggested that the increased pace of uninterrupted consumption with minimal reminders of the external reality increases the likelihood of being transported into the narrative.

Character-related involvement. Viewers may become involved with media characters in multiple ways. First, *parasocial relationships* (PSRs) are friendship-like mediated ties. PSRs, though typically one-sided on the part of the viewer, are strengthened as viewers acquire an increased sense of familiarity and intimacy with the characters (Rubin & McHugh, 1987). They are maintained through social and relational investments that viewers perceive themselves to be making in the relationships, the availability of attractive functional alternatives to this relationship, and the feeling of commitment toward the relationship (Eyal & Dailey, 2012). Upon break-up, viewers feel a sense of loss (Eyal & Cohen, 2006).

Identification with television characters involves a sense of immersion with the character and undertaking of the character's point of view. This process differs from PSRs wherein viewers interact with character as a separate individual (Cohen, 2001). Identification is thought to be a temporary experience, occurring during media exposure (Eyal & Rubin, 2003).

Considering the unique nature of marathon viewing, with its enhanced intensity and focused attention on the content for a longer period of time in one sitting creating a continuous, uninterrupted immersive experience, it is logical to assume that it will contribute to viewers' involvement with the narrative and characters. Thus, this study proposes that:

H3: Extent of marathon viewing will be positively associated with (a) transportation into the show's narrative and (b) identification with the show's character.

While identification and transportation refer to the experience during the media exposure,

PSRs refer to a sense of intimacy with a character that can be experienced between the viewing sessions. Theoretically, it could be that traditional watching, which stretches the encounters with characters over a longer time, creates an illusion of a longer (and thus deeper) relationship.

Conversely, marathon viewing could create a more intense experience. Indeed, Brookes and Ellithorpe (2015) found that marathon viewing was related to greater identification with the characters but not to increased PSRs. It is, thus, asked:

RQ1: How will extent of marathon viewing be associated with PSR with the show's character?

Enjoyment. This study examines the extent to which marathon viewing is intrinsically rewarding. Two forms of enjoyment are considered: a pleasurable affective response (hedonic enjoyment) and a meaningful experience of being moved, or gaining insight about life and the human condition (eudaimonic enjoyment) (Oliver & Bartsch, 2010; Raney, 2003). It has been argued that involvement with the character and the narratives is crucial for enjoyment (e.g., Green, 2004). This is because both resemble a flow state wherein audiences are completely absorbed in the activity. This heightened state of concentration involves loss of self-awareness and other temporal concerns which maximize the person's happiness (Csikszentmihalyi, 1990). Moreover, identification with the characters allows viewers to vicariously share the characters' triumphs and alter their mood positively so long as the character is successful (Raney, 2003).

However, involvement offers viewers more than mere emotionally pleasant experiences. Through engagement with narratives, audiences can experience meaningful, even transforming emotions, and gain insight into self and society (Mar, Oatley, Djikic, & Mullin, 2011). It is conceivable that a condensed marathoning viewing experience creates a particularly immersive, and thus, meaningful experience. Indeed, Conlin and Tefertiller (2016) found that television marathon-watching is associated with a greater appreciation of the content and a more lasting

impression than reading a book and playing a video game. It is, therefore asked:

RQ2a: What is the relationship between extent of marathon viewing and enjoyment (hedonic and eudaimonic) from the show?

Though enjoyment can indeed be viewed from the active audience perspective, the social cognitive model of addiction provides another reason to expect marathon viewing to be related to enjoyment. According to the model, individuals with low self-regulation should experience withdrawal symptoms at the end of the viewing session and crave further media exposure (LaRose, et al., 2003). In other words, marathon viewing can be gratifying for individuals with self-regulation deficiency as viewers do not need to exercise self-control and can act on their urge to passively continue consuming multiple television episodes uninterrupted. Provided the limited empirical evidence in this domain, a research question is posed:

RQ2b: Is the relationship posited in RQ3a moderated by self-regulation?

Study 1

Method

Participants were recruited from introductory communication courses in a university in the United States in exchange for research credit. Students ages 18 years or older who have engaged in marathon viewing (that is, those who watched at least three episodes of a program in one sitting) during the last week were invited to complete an online survey reflecting about this most recent marathon viewing experience. The study focuses on undergraduate college students because of the relatively high prevalence of variables of interest in this population. U.S. college students report high levels of depression and loneliness (Kingkade, 2015; NIMH, 2012), and emerging adults are also especially likely to routinely marathon-watch TV (Spangler, 2016).

Participants. A total of 173 students completed the survey. Three individuals who

reported watching only a single episode were dropped from the analyses along with three identified as outliers for reporting consuming 22-46 episodes in a single day. The final dataset thus included 167 individuals, mostly female (80.8%), ages 18-25 ($M = 19.99$ years, $SD = 1.49$). The majority identified themselves as White (64.5%), and others were Asian (15.7%), Latino (8.4%), Black (0.6%), Native American (0.6%), and 10.2% identifying as “other.”

Measures

Extent of marathon viewing. Participants were first asked to report the number of consecutive days and the average number of episodes per day they spent watching the show in their most recent instance of marathon viewing. The product of the two was used as a measure of extent of marathon viewing. Participants reported marathon-watching 3 to 180 episodes ($M = 21.24$, $SD = 28.29$) over a course of 1 day to 3 months. The average period of marathon viewing ($M = 6.02$ consecutive days, $SD = 10.6$) is typical of the time for consuming a single television season on Netflix (Koblin, 2016). This variable did not distribute normally (Kurtosis = 13.34, S.E. = 0.37) and was log transformed for subsequent analyses (Tabachnick, & Fidell, 2001).

Personality antecedent variables.

Attachment. Hazan and Shaver's (1987) Attachment Style Measure was used, asking participants to choose one of three short paragraphs that best describes them. The majority (72.7%) exhibited a secure attachment style, 17.6% were avoidant, and 9.7% self-identified as anxious. This distribution is consistent with past research (e.g., Muris, Meesters, van Melick, & Zwambag, 2001). Given this distribution, a dummy variable (secure/non-secure attachment) was used in subsequent analyses.

Depression. The study used the seven-item version of the Center for Epidemiological Studies Depression Scale (Mirowsky & Ross, 1992). The same items that were previously used

by LaRose et al. (2003) were used here (see Appendix). Participants were asked how they felt in the past month by indicating agreement on a five-point scale with higher scores represented greater depression ($M = 1.95$, $SD = 0.68$, $\alpha = 0.76$).

Loneliness. Nine items (out of 20, see Appendix) on a five-point scale from the UCLA Loneliness Scale (Russell, 1996) were used ($M = 2.84$, $SD = 0.66$, $\alpha = 0.93$) with higher scores indicating greater chronic loneliness.

Self-regulation deficiency. The complete seven-item measure was adapted from LaRose et al.'s (2003) Deficient Internet Self-Regulation Scale (see Appendix). Higher scores on the five-point scale indicated greater self-regulation deficiency ($M = 3.18$, $SD = 0.79$, $\alpha = 0.85$).

Audience member involvement variables. These variables were measured on a five-point Likert scale (see Appendix). Higher scores represent more intense involvement.

Transportation. Three items assessing involvement through mental simulation of the narrative world were used from Green and Brock's (2000) 11-item scale commonly used to assess transportation ($M = 3.83$, $SD = 0.77$, $\alpha = 0.76$).

Enjoyment. Hedonic enjoyment was assessed by agreement with three items from Oliver and Bartsch's (2010) $M = 4.57$, $SD = 0.63$, $\alpha = 0.94$). Eudaimonic enjoyment was measured by five items adapted for the purpose of this study based on Oliver and Bartsch (2010) and Oliver and Raney (2011) ($M = 3.20$, $SD = 1.17$, $\alpha = 0.94$).

Parasocial relationship. Four items from the 20-items Parasocial Interaction Scale (Rubin & Perse, 1987) were used to examine relational aspects of PSRs. These four items have been used in prior research as a short version of the scale (e.g., Tukachinsky & Sangalang, 2016) ($M = 3.89$, $SD = 0.68$, $\alpha = 0.74$).

Identification with a character. Identification was assessed with five items from Cohen's

(2001) 10-item identification scale ($M = 3.92$, $SD = 0.66$, $\alpha = 0.82$).

Control variables. In addition to sex and ethnicity, participants were asked to classify the genre of the program that they reported marathon viewing. Their classification was then subject to an evaluation and verification by the first author based on face validity. Genres included dramas (39.5%), comedies (28.1%), crime dramas (12.6%), fantasy (11.4%), and “other” (e.g., cooking show). To control for type of genre a dummy variable (dramatic vs. other genres) was created. Drama was chosen as a distinct genre because previous research has indicated that, relative to other genres, drama tends to be associated with greater thought- and emotion-arousal, both about the content itself and with regard to the person’s own past experiences (McDonald, Sarge, Lin, Collier, & Potocki, 2015; Oliver & Bartsch, 2010). From a media effects perspective too, exposure to dramatic scenes was found to lead to increased awareness of issues and to less trivialization (e.g., Gottfried, Vaala, Bleakly, Hennessy, & Jordan, 2013). This variable allows to account for variance introduced by genre, but since genre was not focal to the study, no more fine-tuned analyses have been conducted.

Results

Predictors of extent of marathon viewing. The first hypothesis considered personality characteristics that predict a person’s extent of marathon viewing. An OSL multiple regression analysis (using SPSS) was used to control for dummy coded variables: sex (female=1), ethnicity (White=1), and genre (drama=1). Secure attachment, depression, and loneliness were added in the second block ($F(6,158) = 2.51$, $p < .05$, Adjusted $R^2 = .05$, $F\Delta R^2(3, 158) = 6.11$, $p < .01$). In line with H1, secure was attachment negatively associated with extent of marathon viewing ($\beta = -.19$, $p < .05$) whereas depression was positively related with extent of marathon viewing ($\beta = .18$, $p < .05$). However, there was not a significant relationship between loneliness and marathon

viewing ($\beta = .07, p = .42$). Thus, H1 was partially supported.

H2 predicted that self-regulation will mediate the relationship between depression and marathon viewing. Adding self-regulation deficiency significantly increased the variance explained by the model ($F(7,157) = 4.14, p < .001$, Adjusted $R^2 = .12$, $F\Delta R^2(1, 157) = 6.11, p < .001$). Self-regulation deficiency was associated with greater marathon viewing ($\beta = .28, p < .001$). Secure attachment remained a significant predictor of marathon viewing ($\beta = -.21, p = .01$) but depression was no longer a significant predictor ($\beta = .08, p = .35$). To examine mediation, Hayes' (2013) PROCESS model 4 was used; the SPSS add-on computed total, direct, and indirect effects with 1,000 bootstrap samples for 95% confidence intervals (see Figure 1 for mediation path coefficients). There was no direct effect of depression on extent of marathon viewing ($B = .05, S.E. = .05, p = .25, C.I. [-.05, .14]$). The indirect ($B = .05, S.E. = .02, C.I. [.02, .09]$) and total ($B = .10, S.E. = .05, p < .05, C.I. [.01, .19]$) effects were significant. The effect of depression was fully mediated by self-regulatory deficiency, such that greater depression was related to more deficient self-regulation, which was associated with more marathon viewing.

Predictors of audience involvement. Three sets of multiple regressions were used to examine the relationships between extent of marathon viewing and three types of media involvement: transportation (H3), PSR (RQ1), and identification (H3). Viewer sex, ethnicity and genre were entered in the first step, and extent of marathon viewing was added in the second step. Contrary to H3's prediction, there was no effect of marathon viewing on transportation ($\beta = .08, p = .32, F(4,161) = .25, p = .91$, Adjusted $R^2 = .00, F\Delta R^2(1,161) = .99, p = .32$). However, adding the extent of marathon viewing was a significant predictor that improved the model for PSR ($\beta = .17, p < .05, F(4,161) = 1.82, p < .05$, Adjusted $R^2 = .02, F\Delta R^2(1,161) = 4.80, p < .05$) and character identification ($\beta = .15, p < .05, F(5,161) = 3.09, p < .05$, Adjusted $R^2 = .05$,

$F\Delta R^2(1,161) = 3.90, p < .05$). The more extensive was the marathon viewing session, the higher was the level of identification and the stronger were the PSRs formed with the characters.

Two multiple regression models were used to examine the relationship between extent of marathon viewing and eudemonic and hedonic enjoyment (RQ2a) controlling for genre, sex, and ethnicity. To examine the possible moderating effect of self-regulation deficiency (RQ2b) this variable was added on the third step of the model and on the fourth step an interaction term between the extent of marathon viewing and the self-regulation deficiency was entered. To examine the interaction, extent of viewing and self-regulation deficiency were mean centered.

No significant relationships were found between hedonic enjoyment and marathon viewing extent ($\beta = -.02, p = .80, F(4,163) = 2.46, p < .05, \text{Adjusted } R^2 = .03$), self-regulation deficiency ($\beta = -.01, p = .95, F(5,162) = 1.96, p = .09, \text{Adjusted } R^2 = .03$), or their interaction ($\beta = -.04, p = .68, F(6,161) = 1.65, p = .14, \text{Adjusted } R^2 = .02$). Extent of marathon viewing was not related to eudaimonic enjoyment ($\beta = -.08, p = .30, F(4,162) = 3.42, p < .01, \text{Adjusted } R^2 = .06$). Regulation deficiency had a significant main effect on eudaimonic enjoyment ($\beta = .18, p < .05, F(5,161) = 3.95, p < .01, \text{Adjusted } R^2 = .08, F\Delta R^2(1,161) = 5.68, p < .05$) but did not moderate the effect of marathon viewing ($\beta = -.37, p = .71, F(6,160) = 3.30, p < .01, \text{Adjusted } R^2 = .08$).

Discussion: Study 1

Study 1 examined predictors of marathon viewing amount and the relationships between the extent of marathon viewing in a particular instance, media involvement, and enjoyment. The study revealed that individuals with more depressive symptoms and more deficient self-regulation engage in more intense marathon viewing. In line with LaRose et al.'s (2003) addiction model, depression was found to fuel regulation deficiency, contributing to greater media consumption. Consistent with past theorization about Internet addiction (Tokunaga &

Rains, 2010), the study identified attachment style as a predictor of extent of marathon viewing. Those with secure attachment style watched significantly fewer episodes in their recent marathoning experience.

The study also offers partial support for the notion that marathoning is driven by gratifications from media involvement. Although there was no relationship between extent of marathon viewing and transportation, the extent of marathon viewing enhanced character involvement both from within the narrative (i.e., identification) and outside of it (i.e., PSR). The more back-to-back episodes viewers consumed the more they interacted with the characters, reflected upon them, and empathized with them. However, they did not necessarily become involved with the narrative. Greater marathon viewing was also unrelated to hedonic enjoyment. But, viewers who felt the urge to keep watching the show were also more reflective.

Study 2

Study 1 examined relationships between personality predictors, extent of marathon viewing, and various involvement experiences. Study 2 asks whether marathon viewing offers a different involvement opportunity compared to the traditional television consumption patterns wherein viewers are exposed to each episode in weekly intervals. Following the logic guiding Study 1 (Conlin & Tefertiller, 2016; Sung et al., 2015), it is assumed that watching episodes from the same show in weekly intervals breaks down the immersive experience into smaller segments. Conversely, the uninterrupted, continuous marathon viewing style affords a more immersive and absorbing experience. Thus, it is hypothesized that:

H1: Viewers will report higher levels of (a) identification with characters and (b) transportation in shows watched in marathon form compared to shows watched in weekly intervals.

It is possible that the involvement experience during media exposure will also translate into

engagement in PSRs outside the particular viewing context and enjoyment overall:

RQ1: Will there be a difference between levels of PSR with a character in shows watched in marathon form compared to shows watched in weekly intervals?

RQ2a: Will there be a difference between levels of enjoyment from watching a show in marathon form compared to watching a show in weekly intervals?

Finally, as in Study 1, we contemplate the possibility that enjoyment from marathon viewing can be particularly rewarding for those unable to effectively regulate their urge to continue watching:

RQ2b: Is the relationship posited in RQ2a moderated by self-regulation deficiency?

Method

Communication students from a United States university over the age of 18 were recruited to participate in the study for research credit. They were asked to think of a recent instance of watching at least three episodes of a television drama or comedy. Half the respondents were randomly assigned to report about an instance in which they watched the episodes one at a time, once a week (traditional viewing condition). The other half of participants were instructed to think of a situation in which they watched the episodes back-to-back (at least three episodes in one sitting, marathon viewing condition). Importantly, the study procedures intentionally did not create a sample of exclusively binge/non-binge viewers. Rather, individuals who may engage in either (or both) traditional and marathon viewing were included in both groups, but they were randomly assigned to recall an instance of engaging in one of these viewing styles. This approach allows to examine the effect of viewing type on involvement and enjoyment, independent of possible individual differences that are likely inherent to viewers who never/always engage in marathoning.

Sample. A total of 101 individuals completed the study. Nine individuals were removed

from the sample because they did not report a marathon viewing experience, as requested, or because they did not report about watching a drama/comedy. The final dataset included 40 participants (43.48%) reporting about a marathon viewing experience and 52 (56.52%) reflecting on a traditional viewing experience (76% female, 76% White, 12% Asian, 8% Latino, 2% Black, 2% Native American). The mean age was 20.13 years ($SD = 1.62$, range 18-26 years).

Measures. Similar measures to those used in Study 1 were employed to assess *self-regulatory deficiency* ($M = 3.24$, $SD = 0.59$, $\alpha = 0.72$), *transportation* ($M = 3.70$, $SD = 0.65$, $\alpha = 0.54$), *identification* ($M = 4.00$, $SD = 0.57$, $\alpha = 0.78$), *PSR* ($M = 3.87$, $SD = 0.64$, $\alpha = 0.70$), and *eudaimonic* ($M = 4.54$, $SD = 0.62$, $\alpha = 0.94$) and *hedonic enjoyment* ($M = 3.00$, $SD = 1.10$, $\alpha = 0.92$).

Results

Similar to Study 1, a set of multiple regressions controlling for sex, ethnicity, and genre were performed predicting each involvement variable. Type of viewing (dummy coded marathon vs. traditional) was added as a predictor on the second step of the regression model (after viewers' sex, race, and genre). Viewing type was only marginally associated with transportation ($\beta = .18$, $p = .067$, $F(5,161) = 1.63$, $p = .17$, Adjusted $R^2 = .04$, $F\Delta R^2(1,87) = 3.43$, $p = .067$) and was not associated with identification ($\beta = .16$, $p = .14$, $F(5,161) = 1.21$, $p = .31$, Adjusted $R^2 = .04$, $F\Delta R^2(1,87) = 2.18$, $p = .14$). However, viewing type (dummy coded with marathon viewing = 1, traditional viewing = 0) significantly associated with PSR ($\beta = .22$, $p < .05$, $F(5,161) = 3.45$, $p < .01$, Adjusted $R^2 = .04$, $F\Delta R^2(1,87) = 4.06$, $p < .05$). In other words, compared to viewers who watched in traditional form, marathon viewers reported higher levels of PSR (RQ1), but not character identification (H1a) and only marginally higher transportation (H1b).

In answering RQ2a and RQ2b, none of the regressions predicting hedonic enjoyment were significant. However, while marathon viewing was not related to eudaimonic enjoyment (β

= .14, $p = .19$, $F(4,162) = 3.42$, $p < .01$, Adjusted $R^2 = .06$) regulation deficiency was a positive predictor of eudaimonic enjoyment ($\beta = .28$, $p < .01$, $F(5,161) = 3.95$, $p < .01$, Adjusted $R^2 = .08$, $F\Delta R^2(1,161) = 5.68$, $p < .05$). The interaction between the variables did not reach conventionally accepted levels of significance ($\beta = -.22$, $p = .08$, $F(6,160) = 3.30$, $p < .01$, Adjusted $R^2 = .08$).

Discussion: Study 2

In examining the difference between marathon and traditional viewing as two unique types of media consumption experiences, Study 2 support and extend the results of Study 1. Marathon viewing was found to be related with greater PSR (but not identification and transportation). Self-regulation deficiency was associated with greater eudaimonic enjoyment.

General Discussion

This two-study design investigated the precursors and possible implications of media marathoning. Building on theory and research on media addiction, the study replicates part of LaRose et al.'s (2003) model, supporting the hypothesized effect of sub-clinical levels of depression (mediated by self-regulation deficiency) on media use. Per this model, individuals who turn to media to regulate their dysphoric mood find it harder to cease the media use (Panek, 2005) and a cycle of habitual media consumption begins. This does not imply that marathoning is inherently pathological or dysfunctional. Rather, the link between depression, self-regulation deficiency, and extent of marathoning is one possible psychological mechanism in media marathoning. In fact, depression accounts only for a small portion of self-regulation deficiency, suggesting that lack of self-control is a broader and pervasive issue.

Furthermore, viewers with non-secure attachment style were found to engage in more intense binge viewing. A possible explanation for the finding is that securely attached individuals are better equipped to manage a week-long separation from their favorite characters. This finding

resonates with studies showing similarities between the mental models governing parasocial and social relationships (e.g., Cole & Leets, 1999). Loneliness, in contrast, did not contribute to marathoning. This finding is in line with findings that marathon viewing fosters social connections and a sense of community (Perks, 2015) and with research findings of inconsistent links between loneliness and viewer-character relationships (e.g., Eyal & Cohen, 2006).

Media Marathoning and the Viewer Experience

Though the study supports LaRose et al.'s model that is rooted in a critical view of intense media use, marathon media viewing is not necessarily dysfunctional, nor is it a passive experience. Rather, the present research suggests, marathon viewing is associated with active media engagement and more meaningful, reflective, and deeper forms of appreciation. Study 1 examined the relationship between the *extent* of marathon viewing and various involvement indicators. Study 2 compared levels of involvement among viewers who consumed a fictional television show in marathon form versus those who viewed in a traditional form of weekly intervals. These distinct approaches to media marathoning yielded consistent results, suggesting that marathoning (vs. traditional viewing) and the extent of marathoning enhance PSRs with the characters. That of all the forms of media involvement marathoning specifically promotes PSR is particularly intriguing. If PSRs resemble the dynamic of social relationships (Eyal & Cohen, 2006; Eyal & Dailey, 2012) then the length and intensity of the acquaintance should theoretically enhance the relationship. What the results of both studies suggest is that a condensed viewing experience -- when the viewer spends more time with the character over a shorter period of time -- results in a stronger PSR compared to less intense or spaced-out encounters. Surprisingly, there was weaker evidence for marathoning impacting involvement *during* the media exposure (identification and transportation). Whereas it was hypothesized that longer uninterrupted media

experience will produce greater immersion into the fictional world, both studies suggest that becoming engrossed in the fictional world can occur even in a brief media exposure session.

An interesting relationship between self-regulation and enjoyment was uncovered. It was postulated that watching multiple episodes at a time will be particularly rewarding for individuals with self-regulation deficiency. However, hedonic enjoyment was not related to viewing type or the extent of media marathoning. Conceivably, watching multiple episodes over a short period of time generates a greater drive to keep watching, and thus, regardless of when ultimately the bingeing session comes to an end, individuals experience equal levels of disappointment. Furthermore, it is possible that with continuous exposure, media consumers habituate and the initial hedonic rewards associated with media exposure diminish. This is not to say that the participants in the study are technology-addicted individuals whose media consumption is entirely habitual and no longer rewarding (Griffiths, 2000). Rather, both studies found a link between self-regulation deficiency (that fuels marathoning) and *eudaimonic* enjoyment. In other words, the urge to continue watching is tied to a more meaningful, reflective, and emotionally-moving experience. These findings are in line with earlier research on media involvement, linking instrumental television viewing, guided by information and entertainment seeking goals, with contentment and a sense of being entertained by a liked show (e.g., Kim & Rubin, 1997; Lee & Taylor, 2014; Rubin & Perse, 1987).

Together, this study's findings highlight the importance of moving beyond “problematic media use” models that underlie the notion of “binge” viewing. Marathon television viewers are active cognitively and emotionally, during and after the media exposure. They form meaningful bonds with characters beyond the moment of exposure. They are not merely entertained, but feel compelled to continue watching as they engage in deep reflection. In this, the study may alleviate

concerns and moral panic that “binge” viewing may cause audience inactivity (Matrix, 2014).

Limitations and Future Research Directions

The study makes an important step expanding traditional models of intense media use, showing that this viewing style is not only a result of poor self-regulation, but is also an active and a very meaningful experience. Interpretations of the study’s findings are grounded in theory but they should be interpreted with caution given its data’s correlational nature. It is not inconceivable that viewers who become highly absorbed in the media content feel compelled to continue watching the next episode. Thus, involvement could be not an outcome but an antecedent of media marathoning. To examine these two competing theoretical explanations, longitudinal studies are due. Perhaps the two seemingly competing hypotheses account for different types of marathoning experiences. It may be beneficial to distinguish between attentive (focused, goal-driven) and inattentive (motivated by relaxation or distraction) “binging” (Steiner & Xu, 2016) and between planned and impulsive binge viewing. Accounting for these factors could reveal distinct psychological pathways underlying what at the surface might appear to be as a similar behavioral media consumption pattern.

Similarly, disentangling the correlational nature of the findings in the present study in experimental or longitudinal designs could fine tune the understanding of the ways in which media marathoning can regulate mood and enhance psychological well-being. For example, it is possible that for individuals who are lonely or depressed, engaging in marathon viewing carries benefits of elevating their post-viewing affect and sense of companionship through enjoyment and PSRs. To explore this possibility, pre- and post-exposure psychological states should be examined as a function of media experiences during the viewing of the show.

Furthermore, with the current study highlighting the meaningful and active facets of

marathon viewing, it is important to expand theory to novel personality predictors that are not grounded in models of dysfunctional media use. While depression and self-regulation do play a role in marathon viewing, they do not account for this experience entirely and additional individual differences should be examined. In addition to broad personality characteristics (e.g., Big-Five), specific traits could predispose individuals to marathon view. For example, it could be hypothesized that need for cognitive closure (Webster & Kruglanski, 1994) would urge viewers to engage in marathon watching because of their desire to have a more complete grasp of the storyline to reduce ambiguity and because of a lower tolerance for “cliff hangers.”

Generalization of study results is limited by the samples that involved predominantly female college students, overrepresented Asian Americans, and had relatively few individuals with non-secure attachment style. To advance a more nuanced understanding of the role of cultural differences and specific types of attachment in marathon viewing, replications using more diverse samples and using a multi-dimensional continuous variable of attachment are warranted. Similarly, examination of how the experience of marathon viewing varies by genre goes beyond the scope of the present study and can be considered in the future. Furthermore, Study 2 specifically examined the differences in involvement when engaging in weekly vs. marathon viewing. However, the comparison involved a situational variable and viewers who sometimes marathon view could be reflecting on their weekly viewing experience, whereas individuals who sometimes watch weekly were asked to recall an instance of marathoning. This was done to eliminate spurious correlations created by individual differences inherent to “always-” versus “never-” binge viewers.” Future studies could explore the psychological make-up of the segments of the population who never or only marathon view.

Another important direction for future investigation involves considering the broader

social context of the media exposure. The current study focused on the individual, personal experience of marathon viewing. Future research can benefit from exploring use of social media and interpersonal communication about the viewed show. For example, loneliness can be positively associated with marathon viewing when watching alone, in social isolation (or come in response to pre-existing isolation). However, marathon viewing with friends or interaction about the show via social media could be *negatively* related to loneliness.

Concluding remarks. The ever-changing social-technological landscape continues to produce new media experiences, but the underlying fundamental psychological principles remain largely unchanged. Today's abundance of streaming platforms and availability of affordable digital devices, arguably both create and fulfill the audience's urge for marathoning. The current study demonstrates the relevance of past models and theories of media consumption to media marathoning in the contemporary environment; it shows that self-regulation deficiency fosters media marathoning, which can lead to more profound forms of media involvement.

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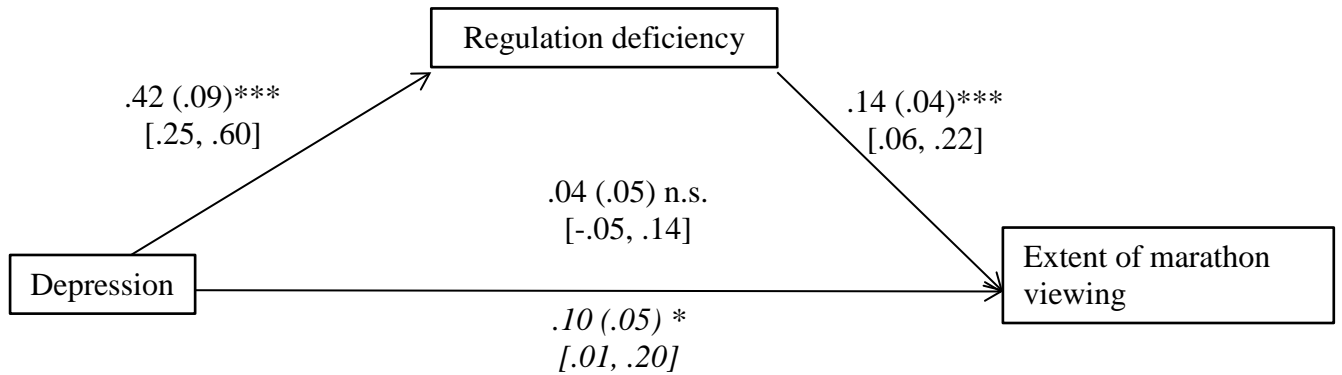


Figure 1. Regulation deficiency fully mediates the relationship between depression and extent of marathon viewing.

Note. Unstandardized regression coefficients (S.E.), [95% Confidence Intervals], * $p < .05$,

*** $p < .001$

Appendix

Involvement and Psychological Measures

PSR: I would like to meet the character in person; If I the character appears in a newspaper or magazine I would read it; If the character appeared on another TV program, I would watch that program; The character makes me feel comfortable, as if I am with a friend.

Identification: I was able to understand the events in the program in a manner similar with how the character understood them; At key moments in the show, I felt I knew exactly what character was going through; I tend to understand the reasons why character does what he/she does; While viewing the show I could feel the emotions the character portrayed; While viewing the show, I wanted the character to succeed in achieving her/his goals.

Transportation: While I was watching the program, I could easily picture the events in it taking place; I could picture myself in the scene of the events described in the program; I was mentally involved in the program while watching it.

Hedonic enjoyment: The show was entertaining; I had a good time watching the show; I enjoyed watching the show.

Eudimonic enjoyment: The show made me focus on meaningful human conditions; The show made me more reflective; The show made me think; The show was moving; The show challenged the way I see the world.

Loneliness: My social relationships were superficial; It was difficult for me to make friends; My interests and ideas were not shared by those around me; I was unhappy doing so many things alone; I had nobody to talk to; I lacked companionship; I felt as if nobody really understood me; There was no one I could turn to; I felt left out.

Depression: I felt that I could not shake the blues even with help from my family or friends; I had trouble keeping my mind on what I was doing; I felt everything I did was an effort, my sleep was restless; I felt lonely; I felt sad; I could not get "going."

Self-regulation: I watch the show so much it interfered with other activities; I had a strong urge to watch the show; I felt that I had to keep watching the show more and more to get my thrill; I felt that my binge watching use is out of control; I would miss the show if I could no longer watch it; I spent longer watching the show than I intended to when I started; I went out of my way to satisfy my urge to watch the show.