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An exploration of the motivations for binge-watching and the role of individual differences

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ABSTRACT

An online survey of 785 binge-watchers was conducted to identify motivations for binge-watching TV drama series and to explore the moderating effects of sensation seeking and need for cognition on binge-watching behavior. The results of a principal component analysis on data collected from these binge-watchers demonstrate that individuals perceive binge-watching as a means to satisfy their desires for enjoyment, efficiency, control, and fandom. In addition, individuals are especially drawn to binge-watching when the activity is recommended by others. Subsequent regression and moderation analyses reveal that sensation seeking and need for cognition not only have positive effects on binge-watching behavior but also boost the effects of certain binge-watching motivations. In sum, this study provides an empirical overview of why individuals are motivated to binge-watch TV dramas and how those with certain psychological traits are more likely to engage in this media-consumption behavior.

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1. Introduction

The advancement and dissemination of information communication technologies (ICTs) have significantly changed the means, patterns, and quality of media consumption in recent years. Most noticeably, the advent of personal media devices and stable Internet connections capable of delivering media content anywhere and anytime has technologically enabled viewers to binge-watch (or marathon-watch) episodes of their favorite programs for hours in immediate succession via online streaming. Viewers are no longer limited to watching one episode of a series each week that follows a linear schedule determined by broadcast channels (Hirsén, 2015; Sodano, 2012). Instead, viewers now have control over the pace of their media consumption and can choose to binge-watch multiple episodes in a single sitting while simultaneously avoiding interruptive commercials and scheduling conflicts (Damratowski, Field, Mizell, & Budden, 2011; Schweidel & Moe, 2016). Recent surveys have revealed that 70% of American viewers watch an average of five episodes per binge-watching session and 88% of Netflix subscribers watch at least three

episodes of the same program in one day (Spangler, 2016), suggesting that binge-watching has now become the predominant video consumption trend.

Accordingly, an increasing number of studies (e.g., Devasagayam, 2014; Jenner, 2016; Karmakar & Kruger, 2016; Pittman & Sheehan, 2015; Sung, Kang, & Lee, 2015) have investigated both the positive and negative effects of binge-watching from the perspectives of marketing, advertising, media effects, and psychiatry, and identified various motivational factors for the trend of heavy video consumption in empirical contexts. Similarly, this study employs an exploratory approach to the identification of specific motivations for binge-watching by conducting focus group interviews, and draws on the theory of uses and the gratification approach to probe the relationship between motivational factors and binge-watching behavior. More importantly, given that individual differences in psychological traits such as sensation seeking and need for cognition are known to influence media consumption (Eysenck & Nias, 1978; Raney, 2006), this study intends to add greater insight to the existing binge-watching literature by demonstrating the moderating effects of these traits on binge-watching behavior.

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2. Theoretical framework

2.1. Motivations for binge-watching

Streaming media, such as Netflix, Hulu, and Amazon Video, have emerged as the main platforms for binge-watching. Although the technological components and functionality of such platforms are critical to understanding the emergence of binge-watching, the current study adopts a nontechnology-oriented, user-centered approach and employs the uses and gratification (U&G) theory to explore some of the potential motivations for binge-watching behavior. U&G theory conceptualizes gratification as the satisfaction obtained by individuals when certain media technologies, services, or content match their expectations and needs (Katz, Blumler, & Gurevitch, 1973). That is, individuals have specific motives for consciously adopting and using media with the deliberate goal of satisfying their own needs (Rubin, 2009). Thus, individual differences in motivation play an integral role in understanding why and how individuals use media to gratify those needs.

Ample studies have adopted a U&G approach to identify and explore motivations for media use. For example, Atkin (1985) argues that individuals are drawn to media to satisfy intrinsic desires (e.g., enjoyment) or pursue extrinsic utility (e.g., information seeking). Similarly, Sherry (2004) posits that media use provides an intrinsically rewarding experience that leads individuals into a more enjoyable and engaging state of flow. Research also suggests that individuals use media to achieve a balance between positive and negative emotional states and to maintain equilibrium by seeking sensation and novelty (Bryant & Miron, 2002; Zillmann & Bryant, 1985). Together, these findings demonstrate that an examination of individual motivations for media use is the first step in explicating the complexity of media effects (Sherry, Lucas, Greenberg, & Lachlan, 2006). By extension, identifying the U&G traits (i.e., the motivational factors) of binge-watching is also likely to help further comprehend how the norms and means for this new trend of media consumption are shaped and transformed according to an individual's motivations.

The motivation for binge-watching can be conceptualized in a multifaceted way. From the psychological perspective, binge behavior is generally defined as the consumption of an item in excessive amounts over a short period of time as a way to escape from reality and to elicit psychological comfort (Greene & Maggs, 2017; Heatherton & Baumeister, 1991). For example, researchers have shown that individuals who exhibit addictive TV-watching behavior have symptoms similar to individuals with substance dependence problems, and experience a strong sense of relaxation even after they have discontinued a binge episode (Kubey & Csikszentmihalyi, 2002). However, binge-watching does not convey a severely negative connotation and is certainly more socially acceptable when compared to TV addiction and other types of binge behavior, such as binge-eating and binge-drinking, although each of these activities are commonly motivated by the desire to obtain and maintain a state of relaxation.

From the technology adoption perspective, Kim and his colleague (Kim & Sundar, 2014; Kim, 2016, 2017) propose a two-dimensional approach to explicating the pattern of mobile technology adoption and use, and demonstrate that both hedonic and utilitarian motivations largely determine how individuals perceive and interact with mobile devices such as smartphones and smartwatches. Hedonic motivations assume that technology use is a function of the pleasurable and enjoyable experience provided by technology, whereas utilitarian motivations emphasize the efficient and functional outcomes facilitated by technology (Deci & Ryan, 2012). Similarly, individuals may be motivated to engage in binge-watching behavior to fulfill both hedonic and utilitarian

needs, suggesting that the motivations for binge-watching are most likely multifaceted. To empirically examine these possibilities, the current study addresses the following research questions, and attempts to identify motivations for binge-watching and validate whether such motivations indeed lead to binge-watching behavior.

RQ1: What are the motivations for binge-watching?

RQ2: Do these binge-watching motivations lead to binge-watching behavior?

2.2. Individual differences: sensation seeking and need for cognition

Individual differences in psychological traits are known to influence the pattern and intensity of media use (Wimmer & Dominick, 2013). For example, Leung and Liang (2016) identify innate tendencies for procrastination and impulsivity as critical trait variables for predicting problematic smartphone use. This demonstrates that psychological traits are associated with the ways in which individuals use media to gratify their needs, suggesting that the pattern and intensity of binge-watching are also likely to be influenced by the extent to which viewers possess certain psychological traits. Specifically, this study examines individual differences in sensation seeking and need for cognition as key psychological traits moderating the effects of binge-watching motivations on binge-watching behavior. These two trait variables have a high relevance to the context of binge-watching as they are known to influence an individual's use of television (Henning & Vorderer, 2001; Hirschman, 1987).

Sensation seeking is defined as “a need for varied, novel, and complex sensations and experiences and the willingness to take physical and social risks for the sake of such experience” (Zuckerman, 1979, p. 10). The sensation seeking trait aids in understand the reason that an individual may choose to consume certain media content. High sensation seekers exhibit a greater acceptance of or desire for captivating stimuli in order to reach an optimal arousal level that is typically higher than those found among low sensation seekers. By extension, high sensation seekers tend to select media contents that are exciting and stimulating rather than ones that are dull and placid in order to elevate the arousal level (Edwards, 1991; Zuckerman, 1994). Such individuals are also more prone to excessive TV viewing because they continuously seek out arousing stimuli/contents on shows while simultaneously engaging in other activities (e.g., changing channels and talking to friends), thereby gratifying their sensation-seeking desires.¹⁸ These studies suggest that binge-watching can also serve as an arousing stimulus, especially for high sensation seekers. Thus, the motivations for binge-watching are more likely to induce stronger additive effects on binge-watching behavior in combination with sensation seeking. The next two hypotheses are formulated to examine these possibilities.

H1. High sensation seekers are more likely than low sensation seekers to engage in binge-watching behavior.

H2. The effects of binge-watching motivations on binge-watching behavior are more pronounced in high sensation seekers than they are in low sensation seekers.

The need for cognition trait is another individual difference closely related to binge-watching. Need for cognition is defined as an individual's tendency to engage in elaborated thinking (Cacioppo & Petty, 1982, p. 116). It explains why certain individuals are more eager to utilize their minds to deal with complex problems, quests, or situations. In this vein, an experiment conducted by Cacioppo and Petty (1982) reveals that participants classified as

high on the need for cognition scale enjoy a complex experimental task more than a simple one. Contrastingly, those low in need for cognition perceive the simple task as more enjoyable than the complex one. Similarly, binge-watching several episodes of a program (especially one involving complex, provocative, delicate, or scientific topics) over a long period of time is likely to require higher levels of cognitive elaboration and resources to receive and process the large amount of mediated contents that are being delivered. When exposed to excessive amounts of media content via binge-watching, individuals high in need for cognition are likely to recall more message arguments (Petty & Morris, 1983) and issue-relevant information (Haugtvedt, Petty, & Cacioppo, 1992).

The serial nature of most TV shows is exhibited in the plot pattern commonly known as a “cliffhanger.” A cliffhanger entails that the main characters of a serialized drama are confronted with an unpredictable revelation at the end of an episode, or that they encounter perilous events and controversial dilemmas (Michlin, 2011). Thus, a cliffhanger may stimulate greater cognitive elaboration on comprehending the plot and the future development of the story. Cliffhanger endings trigger curiosity in the viewers and ensure that they return to the subsequent episode to discover how the dilemmas are resolved (Michlin, 2011). The repeated, continuous exposure to cliffhanger endings via binge-watching is likely to heighten a viewer’s curiosity level. Given that need for cognition is positively associated with curiosity (Li & Browne, 2006) and individuals low in need for cognition tend to be cognitive misers (Cacioppo, Petty, Kao, & Rodriguez, 1986), the heightened level of curiosity provided by binge-watching is likely to have more pronounced effects on individuals with high levels as opposed to those with low levels. Together, these literatures suggest that need for cognition may play a positive role in increasing the likelihood of engaging in binge-watching behavior, and that binge-watching motivations may interact with this individual trait to induce stronger additive effects on binge-watching, thereby leading to the following hypotheses.

H3. Individuals high in need for cognition are more likely than individuals low in need for cognition to engage in binge-watching behavior.

H4. The effects of binge-watching motivations on binge-watching behavior are more pronounced among individuals high in need for cognition when compared to individuals low in need for cognition.

3. Method

3.1. Data collection

To address the research questions and validate the hypothesized moderation model illustrated in Fig. 1, an online survey was emailed to 1300 South Koreans who were registered in an online panel directory developed by a reliable research firm. Binge-

watching has become increasingly popular in South Korea; a survey has shown that 36.1% of female and 46.3% of all respondents in their 20s binge-watch their favorite TV drama series (Korea Communications Commission, 2016). Therefore, South Korea is a suitable and ecologically sound location from which to collect the data for this study. A total of 1125 responses were returned (a response rate of 86.5%), with 340 incomplete or abnormal responses being removed from the pool. The final data set included responses from 785 respondents who reported that they had experienced the binge-watching of a TV drama series in the past three months by using a device such as a television, computer, or smartphone. Detailed demographic information, including gender, age, education level, income, and frequency of media use, is reported in Table 1. The questionnaire items used in the online survey (excepting items that assessed binge-watching motivation) were all adapted from prior validated studies. All variables were measured on 5-point Likert scales ranging from “1 = strongly disagree” to “5 = strongly agree.”

3.2. Measurement

The motivations for binge-watching were assessed using 19 statements developed during focus group interviews conducted with 23 binge-watchers (15 females, 8 males). Given that there has been little investigation of the specific motivations for binge-watching, a principal component analysis (PCA) was conducted on the 19 statements to identify common underlying structures. This analysis revealed five motivation factors (i.e., principal components) for binge-watching, as follows: *enjoyment* ($M = 3.80$, $SD = 0.67$, $\alpha = 0.80$), *efficiency* ($M = 3.70$, $SD = 0.69$, $\alpha = 0.85$), *recommendation of others* ($M = 3.40$, $SD = 0.65$, $\alpha = 0.75$), *perceived control* ($M = 3.35$, $SD = 0.80$, $r = 0.50$, $p < .001$), and *fandom* ($M = 3.30$, $SD = 0.79$, $\alpha = 0.75$). The PCA results are discussed in detail in the results section.

Binge-watching behavior ($M = 3.41$, $SD = 0.70$, $\alpha = 0.67$) was

Table 1
Demographic variables of the respondents used as the covariates.

	Frequency	%
Gender		
Male	368	46.88%
Female	417	53.12%
Age		
14–19	193	24.59%
20–29	400	50.96%
30–39	134	17.07%
40–49	23	2.93%
50–59	35	4.46%
Education level		
Middle school graduate or less	75	9.96%
High school graduate	102	12.99%
Undergraduate student	229	29.17%
Undergraduate graduate	301	38.34%
Graduate student	36	4.59%
Graduate degree	42	5.35%
Monthly income		
<US\$2000	100	12.74%
US\$2000–US\$4000	299	38.09%
US\$4000–US\$6000	206	26.24%
US\$6000–US\$8000	89	11.34%
>US\$8000	91	11.59%
Daily smartphone usage (min)	$M = 375.07$ $(SD = 252.98)$	
Daily nonlinear video watching TV (min)	$M = 82.21$ $(SD = 90.61)$	
Daily nonlinear video watching on other media (min)	$M = 116.88$ $(SD = 111.57)$	
Number of videos watched daily	$M = 1.91$ ($SD = 1.64$)	

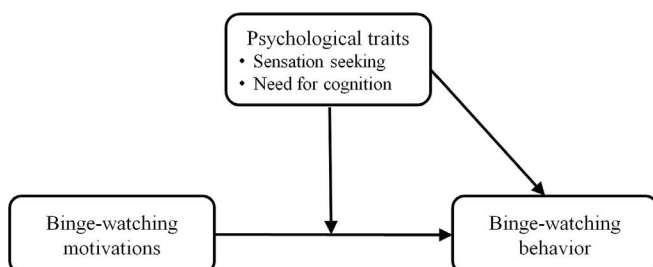


Fig. 1. Hypothesized moderation model of binge-watching behavior.

assessed by asking the respondent to rate their agreement with statements such as “I tend to watch multiple videos/episodes of a particular TV program in one sitting,” “I tend to watch multiple videos/episodes of a particular TV program as quickly as possible,” and “I sometimes happen to binge-watch a particular TV program.” These items were adapted from [Pena \(2015\)](#).

Need for cognition ($M = 3.29$, $SD = 0.57$, $\alpha = 0.80$) was measured with eight items adapted from [Thompson's \(1995\)](#) need for cognition scale. The measure included items such as “I find a lot of satisfaction in deliberating hard and for long hours” and “The notion of thinking abstractly is appealing to me.”

Sensation seeking ($M = 2.90$, $SD = 0.65$, $\alpha = 0.78$) was measured with eight items adapted from the Brief Sensation Seeking Scale developed by [Hoyle, Stephenson, Palmgreen, Lorch, and Donohew \(2002\)](#). The measure included items such as “I would like to explore strange places” and “I like to do frightening things.”

Demographic variables, such as gender, age, education level, income, and frequency of media use, were measured and controlled for the analysis in order to observe the sole effects of the motivational factors of binge-watching. [Table 1](#) contains the descriptive statistics of these covariates.

4. Results

4.1. Binge-watching motivations

To address the first research question, this study conducted a PCA on the 19 statements regarding binge-watching obtained from the focus groups interviews. The results of the Kaiser-Meyer-Olkin (KMO) statistics of sampling adequacy ($KMO = 0.89$) and Bartlett's test of sphericity indicated that the sample was adequate and that the correlations among the variables were suitable for analysis. Using an un-orthogonal Promax rotation, the PCA extracted a set of principal components that were retained based on Kaiser's criteria, by which Eigenvalues must be greater than 1.00 and factor loadings must be greater than 0.60. These principal components were taken to represent distinctive motivations for binge-watching ([Table 2](#)). Terms and definitions were then adapted from previous studies

([Coppa, 2006](#); [Perse & Rubin, 1989](#); [Rubin, 1983](#)) to name and define these motivations in the binge-watching context, as follows: *enjoyment* (four items; motivated by desire for fun and entertainment), *efficiency* (four items; motivated by desire for practicality in media consumption), *recommendation of others* (four items; motivated by desire to avoid watching uninteresting shows by attending to others' feedback), *perceived control* (two items; motivated by desire to have control over media consumption), and *fandom* (three items; motivated by desire to form a relationship with a media character). These five factors accounted for 69.61% of the variance and exhibited strong reliability (i.e., the Cronbach's α and Pearson's r values were greater than 0.75 and 0.50, respectively), which indicates the face-validity of the measurement items. The factors were significantly correlated with each other, suggesting that such motivations are complementary rather than mutually exclusive.

4.2. Effects of binge-watching motivations and psychological traits

Regression analyses were conducted to examine the potential relationships among the measured variables. [Table 3](#) summarizes the regression model predicting binge-watching behavior as a function of the demographic variables and frequency of media use (Block 1), motivations for binge-watching (Block 2), psychological traits (Block 3), and interaction effects between the motivation variables and psychological traits (Block 4).

With regard to the second research question, three motivation variables (i.e., enjoyment, $B = 0.19$, $SE = 0.04$, $p < .001$, efficiency, $B = 0.19$, $SE = 0.04$, $p < .001$, and fandom, $B = 0.18$, $SE = 0.03$, $p < .001$) predicted binge-watching behavior when demographic variables and frequency of media use were controlled for (Block 2 of [Table 3](#)). The stronger the motivations of binge-watchers, the more frequently they engaged in binge-watching behavior.

As reported in Block 3 of [Table 3](#), sensation seeking predicted binge-watching behavior, $B = 0.10$, $SE = 0.04$, $p < .01$, such that high sensation seekers were more likely to engage in binge-watching behavior than were low sensation seekers. Therefore, H1 was supported, verifying the positive association between sensation seeking and binge-watching behavior.

Table 2
Results of principal component analysis of binge-watching motivation.

“I binge-watch because ...”	Component				
	EN	EF	RO	PC	FD
Some programs are more interesting that way	.63	-.09	-.10	.12	.41
I can watch entire series of programs in one sitting	.89	-.02	.08	-.03	-.09
Binge-watching whole series is usually more enjoyable	.79	-.03	.06	.05	.10
I prefer watching series of episodes continuously	.67	.25	.01	.01	-.19
Binge-watching can lessen the total time spent on watching the series	-.06	.65	.09	.33	-.11
Binge-watching is more efficient	-.03	.89	-.03	-.02	.09
Binge-watching is more convenient	.09	.86	-.02	-.08	-.01
Binge-watching is useful	.03	.76	.03	-.02	.15
I found programs with good reputations that were worth watching	.14	-.14	.82	-.06	.04
I heard about some popular programs	-.06	.09	.84	.02	.00
I heard about some programs are must-watch	.00	-.03	.72	.17	-.02
Some programs are fun to binge, according to word-of-mouth	.04	.14	.75	-.16	.02
I can freely choose the scenes I want to watch	.21	-.04	-.03	.88	-.11
I can skip to the end to selectively watch the highlight of an episode	-.14	.09	-.02	.82	.12
It became habitual for me to binge-watch TV programs starring actors/characters I like	.04	.15	-.07	-.02	.81
I like to save my favorite TV programs for later as a fan	.08	.13	.00	-.11	.79
Binge-watching helps me better engage in my favorite TV program's fan community activities	-.22	-.19	.19	.15	.69
Eigenvalue	1.40	6.07	2.25	1.01	1.11
% Variance explained	8.22	35.69	13.24	5.95	6.50

Note. Principal component analysis with Promax was used.

EN: enjoyment, EF: efficiency, RO: recommendation of others, PC: perceived control, FD: fandom.

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3

Results of ordinary least squares regressions predicting binge-watching behaviors.

Variables	B (S.E.)
Block 1. Controls	
(Intercept)	3.56 (.11) ***
Socio-demographic	
Gender (female = 1)	.02 (.05)
Age	-.01 (.00) ***
Education	.00 (.02)
Income	.01 (.01)
Daily media use	
Time on smartphone usage	-.01 (.01)
Time on TV viewing	.02 (.02)
Time on other devices viewing	.05 (.02) **
Number of VODs viewed	.03 (.02)
R ²	.05 ***
Block 2. Motivations	
EN	.19 (.04) ***
EF	.19 (.04) ***
RO	.00 (.03)
PC	.03 (.03)
FD	.18 (.03) ***
ΔR ²	.23 ***
Block 3. Psychological traits	
SSK	.10 (.04) **
NFC	.09 (.04) *
ΔR	.02 ***
Block 4. Motivations × psychological traits	
EN × SSK	.21 (.06) **
EF × SSK	-.19 (.06) **
RO × SSK	.12 (.05) *
PC × SSK	.04 (.04)
FD × SSK	-.06 (.05)
EN × NFC	-.10 (.08)
EF × NFC	-.12 (.07)
RO × NFC	-.07 (.06)
PC × NFC	-.03 (.05)
FD × NFC	.16 (.05) **
ΔR ²	.04 ***
Total R ²	.34 ***

Note. Coefficients indicate non-standardized OLS regression coefficients; standard errors are given in parentheses.

EN: enjoyment, EF: efficiency, RO: recommendation of others, PC: perceived control, FD: fandom, SSK = sensation seeking, NFC = need for cognition.

* $p < .05$, ** $p < .01$, *** $p < .001$.

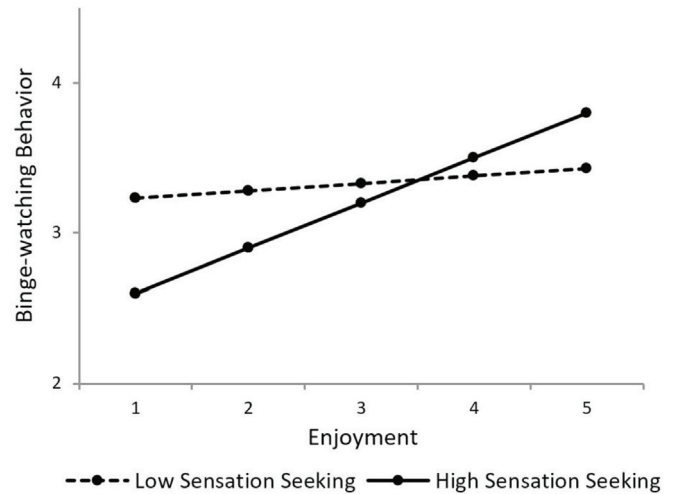


Fig. 2. Two-way interaction between enjoyment and sensation seeking predicting binge-watching behavior.

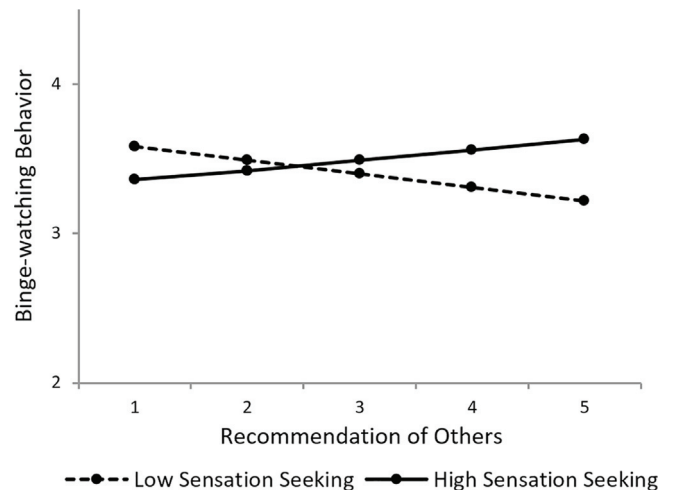


Fig. 3. Two-way interaction between recommendation of others and sensation seeking predicting binge-watching behavior.

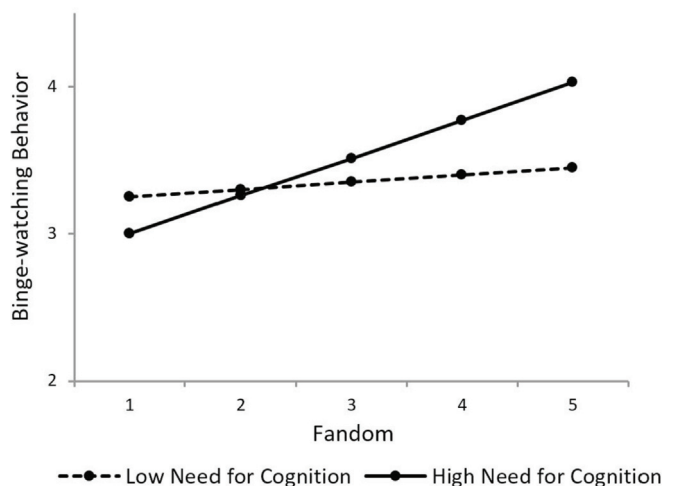


Fig. 4. Two-way interaction between fandom and need for cognition predicting binge-watching behavior.

Simple slope analyses revealed significant interaction effects between some of the motivational factors and sensation seeking on binge-watching behavior. For high sensation seekers, enjoyment, $B = 0.21$, $SE = 0.06$, $p < .01$, and recommendation of others, $B = 0.12$, $SE = .05$, $p < .05$, led to a greater likelihood of engaging in binge-watching behavior. However, enjoyment made no difference to low sensation seekers (Fig. 2), and recommendation of others inhibited binge-watching behavior among low sensation seekers (Fig. 3). Therefore, H2 was supported. That is, the effects of binge-watching motivations on binge-watching behavior were more pronounced in high sensation seekers when compared to low sensation seekers.

As predicted by H3, need for cognition was a significant predictor of binge-watching behavior, $B = 0.09$, $SE = 0.04$, $p < .05$, such that individuals with a high need for cognition were more likely to engage in binge-watching behavior than were those with a low need for cognition. H4 was also supported. For individuals with a high need for cognition, fandom led to a greater likelihood of engaging in binge-watching behavior, $B = 0.16$, $SE = 0.05$, $p < .01$. However, fandom made no difference to those with a low need for cognition (Fig. 4).

5. Discussion

By analyzing data collected from 786 binge-watchers, this study identifies enjoyment, efficiency, recommendation of others, perceived control, and fandom as the key motivations for binge-watching, and demonstrates that three of these motivations (i.e., enjoyment, efficiency, and fandom) are significant predictors of self-reported binge-watching behavior, especially among individuals with a higher need for cognition and sensation seeking. Specifically, the sense of efficiency and perceived control brought on by binge-watching are found to be the utilitarian motivations for the rapid, continuous consumption of media. Video-streaming services such as Netflix enable non-linear viewing. That is, viewers are no longer required to watch one episode of a TV show at a time each week on television at home. Rather, they are now able to watch multiple episodes of their favorite programs almost anywhere and at anytime via a device with Internet connectivity, such as a computer, smart TV, or smartphone. Such efficiency of and control over media choice and consumption can heavily motivate viewers to binge-watch.

Contrary to the efficiency and perceived control motivations, which emphasize the pragmatic, utilitarian benefit of binge-watching, fandom and enjoyment offer hedonic gratification. Prior studies (e.g., Devasagayam, 2014; Perse & Rubin, 1989) have shown that binge-watching allows viewers to seamlessly follow characters and plots from one episode to the next. In turn, this ability facilitates their psychological escape from daily stress and aids in their entrance into a fantasy world in which they believe they can interact with beloved, mediated characters. In addition, the amounts of TV viewing and fandom activity are found to be positively correlated (O'Donovan, 2016), suggesting that the desire for a relationship with a media character (i.e., the fandom motivation) is likely to be intensified in the binge-watching context, in which viewers are continuously (and sometimes excessively) exposed to media. Similarly, binge-watching can also gratify a viewer's desire for enjoyment and entertainment by providing a flow experience. That is, they receive the pleasurable feeling of being completely immersed in a show's storyline.

The results of the regression analyses indicate that the enjoyment, efficiency, and fandom motivations are indeed positively associated with binge-watching behavior. Consistent with the view of the self-determination theory on enjoyment (Deci & Ryan, 2012; Renaud-Dubé, Guay, Talbot, Taylor, & Koestner, 2015; Tamborini, Bowman, Eden, Grizzard, & Organ, 2010), the sense of amusement and excitement driven by serial, continuous exposure to media (Bourdaa, 2011) might have enabled individuals to fulfill their intrinsic motivation (i.e., enjoyment). In addition, the utilitarian benefits (i.e., the convenient, expedient, and unrestricted access to media content) of the efficiency of binge-watching might have also enabled them to realize that their favorite programs are accessible at will, thereby eliciting binge-watching behavior. With regard to the fandom motivation, the results indicate that the desire to form a relationship with favorite TV characters and writers leads individuals to engage in actual binge-watching behavior. This is consistent with earlier studies that have demonstrated that fandom activity has become not only one popular way of participating in and interacting with media but also the primary reason for this new type of binge behavior (Coppa, 2006; Devasagayam, 2014), providing an empirical counterargument to scholars (e.g., Jenner, 2016; Ramsay, 2013) who have doubted the role of fandom activity in binge-watching.

Another contribution of this study is its confirmation of psychological traits as influential moderators of media consumption. The findings demonstrate that sensation seeking and need for cognition have positive effects on binge-watching behavior, and

that, more importantly, individual differences in such traits play an integral role in moderating the effects of certain binge-watching motivations. Enjoyment and recommendation of others serve as strong motivators, especially for high, compared to low, sensation seekers. Sensation seekers are likely to be drawn to binge-watching because they try to avoid the boredom and restriction created by conventional TV watching (Lin & Tsai, 2002; Zuckerman, 2014). Therefore, the motivation of enjoyment, driven by the desire for fun and entertainment, interacts positively with sensation seeking to further promote binge-watching behavior. Similarly, the insatiable desire of high sensation seekers for thrilling, novel stimulation (Zuckerman, 2014) is also likely to increase the likelihood of binge-watching, especially when the viewer is motivated to avoid watching unexciting shows by attending to the feedback of others. This is evident by examination of the interaction between recommendation of others and sensation seeking in predicting binge-watching behavior.

Need for cognition is found to be as equal an influential psychological trait in binge-watching as sensation seeking. The finding that the attraction for media characters is a crucial motivation suggests that binge-watching a show, or engaging with its actors, writers, and narratives, can facilitate the formation of an individual relationship with a desired celebrity (O'Donovan, 2016). Subsequently, such desire is likely to induce a double effect on binge-watching behavior when combined with a higher need for cognition, as demonstrated by the interaction between the motivation of fandom and need for cognition. Those with a high, compared to low, need for cognition may be more prone to fandom because forming a relationship with a character portrayed in media requires a sustained cognitive process of exploring, evaluating, and being fascinated by the character. This results in more extensive binge-watching behavior.

However, the fact that sensation seeking and need for cognition showed moderating effects only for some, but not all, of the binge-watching motivations suggests that these traits may consist of sub-components that are more/only responsive and influential to certain motivations rather than others. Although sensation seeking and need for cognition are multidimensional traits (Tanaka, Panter, & Winborne, 1988; Zuckerman, 1971), the measures used in this study do not precisely distinguish and capture such multidimensionality of the traits. This suggests a possibility that the observed moderating effects might have been induced only by a particular sub-component relevant to a certain motivation. Therefore, future studies would do well to address this limitation and adopt multidimensional measures for sensation seeking and need for cognition to investigate the role played by these traits more precisely.

Another limitation of the study arises from the questionable generalizability of the findings to different program genres and countries, as the data were collected only from South Korean binge-watchers of TV drama series. A recent report reveals that, although TV dramas are still the most popular among binge-watchers, nearly 25% of binge-watching is done with shows of other genres, such as comedy and reality TV (Spangler, 2016). Given that different genres of TV programs have different purposes and intended viewers, the motivations identified in this study may not be as influential when shows other than dramas are being watched. Similarly, the national homogeneity among the respondents in this study may not provide a comprehensive picture of binge-watchers. Therefore, future studies should incorporate the potential moderating role of program genres and recruit more diverse, international respondents to enhance generalizability.

Earlier research has proposed various factors that motivate binge-watching, such as engagement, relaxation, entertainment, passing time, and escape from reality (Pittman & Sheehan, 2015; Sung, Kang, & Lee, 2015). This study adds to the existing

literature by identifying enjoyment, efficiency, and fandom as key motivations that largely predict an individual's binge-watching behavior. More importantly, this study demonstrates the integral role of individual differences in sensation seeking and need for cognition in moderating the relationship between the motivation factors on binge-watching behavior. Together, the study findings empirically address questions about the reasons and motivations of individuals that are likely to engage in bingeing through the consumption of media.

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