Uses and gratifications of problematic mukbang watching – The role of eating and social gratification: A pilot study

Kagan Kircaburun [a,b,*], Mustafa Savcı [c], Emrah Emirtekin [d], Mark D. Griffiths [a]

[a] International Gaming Research Unit, Psychology Department, Nottingham Trent University, Nottingham, UK
[b] Educational Sciences Department, Düzce University, Düzce, Turkey
[c] Educational Sciences Department, Fırat University, Elazığ, Turkey
[d] Distance Education Application and Research Center, Ege University, İzmir, Turkey

Introduction

Mukbang watching (i.e., watching videos of "eating broadcasts" where someone eats a large amount of food while interacting with viewers) has become increasingly prevalent among internet users. However, this behavior might become problematic (e.g., addictive, excessive) for some users (Kircaburun et al., 2021a). Based on the biopsychosocial model of addiction (Griffiths, 2005), problematic mukbang watching can be determined by six core components comprising: mood modification (i.e., excessive mukbang watching leading to specific changes in mood states), salience (i.e., total preoccupation with mukbang watching), tolerance (i.e., increasing amounts of time spent watching mukbang), withdrawal symptoms (i.e., negative feelings and psychological symptoms such as irritability, anxiety when mukbang watching is restricted), conflict (i.e., compromising occupation, education, and/or interpersonal relationships as a direct result of mukbang watching), and relapse (i.e., returning to excessive mukbang watching after a period of abstinence). Problematic mukbang watching can be conceptualized as being overly concerned about mukbang watching, to be driven by a strong motivation to watch mukbang, and to spend excessive time and effort for watching mukbang that it causes severe

problems with an individual's mental health and wellbeing (Andreassen, 2015). Problematic mukbang watching can have negative consequences and/or correlates including disordered eating, distortion of eating and table manners, adolescent obesity, and adult overweight (Kircaburun et al., 2020a, 2021b; Nam & Jung; 2021), although, there is still a lack of empirical evidence associating problematic mukbang watching to negative mental health outcomes, and the direction of the association between these variables. Investigating the factors that may lead to elevated problematic mukbang watching can help further understand this behavior. However, there is a large knowledge gap in the extant literature for assessment tools that investigate the motivational risk factors of recreational and/or problematic mukbang watching. Therefore, developing such measures would help better understand the underlying desires for watching mukbang.

A recent scoping review noted that eating and social uses and gratifications of mukbang watching (i.e., watching mukbang to compensate real life eating and watching mukbang as a virtual social activity) appeared to be the two most important motivations that led individuals to spending time watching mukbang (Kircaburun et al., 2021b). Therefore, the present study focused only on eating and social motivations associated with mukbang watching. Furthermore, it has been suggested that obtaining gratifications from using a particular activity can lead to problematic use of it (Kircaburun et al., 2020b). To date, very few cross-sectional examinations have documented that mukbang watching can be problematic (e.g., addictive) for some of its users and loneliness and daily time spent watching mukbang were positively related to elevated problematic mukbang watching (Kircaburun et al., 2021a, 2021c). The present pilot study, from uses and gratifications perspective, focused on the associations between eating gratification and social gratification with problematic mukbang watching. Previous qualitative research has shown that individuals can use mukbang watching as a way of alleviating their loneliness and social isolation (Bruno & Chung, 2017), as well as displacing real life food consumption with virtual

eating and satisfying food cravings (Choe, 2019). The present preliminary cross-sectional study aimed at providing empirical evidence for the relationship of eating and social gratifications with problematic mukbang watching.

Methods

A total of 170 students from Yaşar University (M_{age} = 21.56, SD = 2.24, 68% female, range = 19 to 42 years) who watched mukbang in the past year participated in the study (see Table 1 for demographic details). Participants were recruited from a university distance learning center, acknowledging that participation in the study was anonymous and voluntary. Participants were contacted via their online courses and asked to complete the survey if they were eligible to the aforementioned criteria. The measures included the: (i) Mukbang Addiction Scale (MAS; six items, scores range from 6 to 30 [Kircaburun et al., 2021a], Cronbach's α = .94), (ii) Mukbang Gratification Scale (MGS [developed for the present study]; six items for eating gratification and five items for social gratification [Table 2]. Problematic mukbang watching was the outcome variable, and eating gratification and social gratification were the independent variables. MGS items were selected following a review of the existing literature (Kircaburun et al., 2021b). No pilot testing study was conducted. Exploratory factor analysis (EFA) confirmed the theoretical expectations that the MGS had two sub-factors [eating gratification and social gratification], explaining 71.20% of the variance [KMO = .88, Barlett's Test of Sphericity = p<.001], confirmatory factors analysis (CFA) with the 11-item final scale indicated that two-factor structure of the scale had adequate fit to the data [χ^2/df = 3.35, RMSEA = .12 (CI 90% [.10, .14]), SRMR = .06, CFI = .92, GFI = .89, IFI = .93, TLI = .90]. Items [1 = never, 5 = always] were averaged to create indices of eating gratification [α = .94] and social gratification [α = .91].). Ethical approval for the study was received from the university's ethics committee, and complied with the Declaration of Helsinki.

Results

Skewness and kurtosis values (ranging between .68 and 5.63) indicated that data were normally distributed and normality assumptions were not violated (Kline, 2011; West et al., 1995). Tolerance values were above .10 (ranging between .62 and .97), variation of inflation (VIF) values were below 10 (ranging between 1.03 and 1.63), and Durbin-Watson value was above 1.0 (1.77). These values indicated that, despite the moderate and strong correlations among variables (not depicted in the table), there were no multicollinearity and autocorrelation. Hierachical regression analysis was applied with problematic mukbang watching as the outcome variable, eating and social gratifications as predictors, and gender and age as control variables. Consequently, being male (β = .12, $p<.05$) and eating gratification (β = .72, $p<.001$) were positively related to problematic mukbang watching whereas age (β = -.03, $p>.05$) and social gratification (β = .01, $p>.05$) were non-significant. The tested model (not depicted in the table) explained 55% of the variance in problematic mukbang watching (R^2_{Adj} = .55; $F_{(4,165)}$ = 52.83; $p<.001$).

Discussion

The study examined the relationship of two strongest motivations for watching mukbang with problematic mukbang watching and found that eating gratification (but not social gratification) was positively associated with problematic mukbang watching. It appears that participants of the present study who watched mukbang for obtaining virtual eating gratification reported more problematic watching of mukbang when compared to the ones that use mukbang as a social event that mitigates their loneliness and social isolation. This is consistent with the conclusions of a recent empirical study that argued that mukbang watching was related to different eating-related motivations including (i) learning about new types of food, (ii) satisfying

cravings for food that is not accessible, (iii) satisfying cravings for food that is forbidden while dieting, and (iv) curbing hunger (Anjani et al., 2020).

In the light of present findings, it could be argued that mukbang watching might be an extension of real life food and eating interest (Kang, Yun, & Lee, 2021). Furthermore, problematic mukbang watching could be an extension of food addiction. Although, the aforementioned argument goes beyond the present results, extant literature has repeatedly identified the reflection of offline behavioral addictions in online platforms. For instance, sex addiction has been associated with different sexual behaviors including regular internet pornography use and using internet for sexual purposes (Rosenberg, Carnes, & O'Connor, 2014). Similarly, some food addicts might satisfy their real-life food cravings and eating needs via watching others eat, giving them the virtual pleasures of excessive food consumption and eating (Kircaburun et al., 2021b). However, further studies are needed to better understand the relationships between eating gratification of mukbang watching, food addiction, and problematic mukbang watching.

Limitations

This study has several limitations. The sample size was relatively small (although was adequate for a pilot study). Future studies should investigate the aforementioned relationships using larger and more diverse study groups. The sample comprised individuals who watched mukbang in the past year. Future studies should include individuals who watch mukbang more regularly. The present study used a cross-sectional design. Future studies should adopt more in-depth methodologies (e.g., qualitative design) to gain deeper insights concerning the relationships examined in the present study.

Conclusions

Despite its limitations, this study is one of the preliminary attempts to investigate problematic mukbang watching and its psychological and motivational correlates. It appears that satisfying real life eating needs by obtaining virtual eating gratification from mukbang watching could be a more serious risk factor for developing problematic mukbang watching and suffering unwanted negative consequences. Further empirical research is needed to examine the predictors and outcomes of problematic mukbang watching, as well as its relationship with real life food and food addiction.

Conflict of interest

On behalf of all authors, the corresponding author states that there is no conflict of interest.

Declarations

Not applicable.

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Table 1. Participant characteristics

Variable		N	%
Gender	Male	115	67.6
	Female	55	32.4
Age	19	16	9.4
	20	36	21.2
	21	44	25.9
	22	32	18.8
	23	22	12.9
	24	10	5.9
	25	8	4.7
	26	1	0.6
	42	1	0.6
Daily time spent	0-30 minutes	153	90
watching mukbang	30-60 minutes	8	4.7
	60-90 minutes	7	4.1
	More than 120 minutes	2	1.2
Daily number of	0	95	55.9
mukbang videos	1-2	60	35.3
watched per day	3-4	7	4.1
	5-6	6	3.5
	7-8	1	0.6
	More than 9	1	0.6

Table 2. Results of exploratory and confirmatory factor analyses of the Mukbang Gratification Scale

Component	Factor Loadings		Communalities	SRW
	EG	SG		
Eating gratification				
Item 9 (If the mukbanger does not consume all the meal during the mukbang video I feel lack of satisfaction and disturbed)	**.95**	.12	.80	.82
Item 11 (I feel full and lose interest in food when I watch mukbang for a certain amount of time.)	**.84**	.14	.67	.61
Item 2 (I prefer watching mukbangers who can eat fast with big bites)	**.77**	-.08	.74	.83
Item 8 (I feel disturbed when the mukbanger starts eating slower due to making conversations with the audience)	**.77**	-.13	.88	.79
Item 10 (I prefer watching mukbang while I am hungry)	**.72**	-.18	.67	.83
Item 7 (The amount of food consumed is the important part for me while watching mukbang)	**.71**	-.15	.63	.80
Social gratification				
Item 5 (I prefer watching mukbangers whose voices and way of talk I like)	-.09	**.98**	.70	.91
Item 1 (I prefer watching mukbangers whose conversations and chat I like)	-.03	**.91**	.80	.86
Item 6 (The main interest for me while watching mukbang is the conversation/talk rather than the food)	-.01	**.82**	.69	.77
Item 4 (I prefer watching mukbangers who explain the food being eaten)	.15	**.77**	.61	.82
Item 14 (It is important for me to see the mukbanger's full face and facial expression while watching mukbang)	.27	**.63**	.65	.75
Eigen value	6.22	1.61		
Variance (%)	56.58	14.62		

Note: EG = Eating gratification; SG = Social gratification; SRW = Standardized regression weights; total variance explained = 71.2%, mukbanger = the person who eats the food in the mukbang