The association of addictive mukbang watching with mukbang watching motives, emotion regulation, impulsivity, and psychiatric distress

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Abstract

Extant literature has focused on the psychological and emotional predictors of addictive use of different types of specific online activities, including social media addiction, online gaming addiction, and online sex addiction. However, there is little research on the addictive engagement of watching online eating shows called mukbang. The present paper describes the research protocol of a study that will examine motivational, emotional, and psychological risk factors of addictive mukbang watching. An online survey comprised of the Motives for Watching Mukbang Questionnaire, Mukbang Addiction Scale, Short UPPS-P Impulsivity Scale, Difficulties in Emotion Regulation Scale, and Depression Anxiety Stress Scales will be used to collect data from at least 1,000 mukbang watchers. The research methodology of the investigation is illustrated in the present paper, and describes the data collection, assessment tools, and analytic strategy that will be used to investigate the research questions and hypotheses. The study will contribute to the literature by providing empirical evidence on associations which have never before been demonstrated. More specifically, the relationship between addictive mukbang watching and mukbang watching motives, impulsivity, emotion regulation, and psychiatric distress will be provided. Furthermore, future directions on studying addictive mukbang watching are discussed.

Keywords: Mukbang; Online addictions; Mukbang addiction; Impulsivity; Emotion regulation; Protocol

Submitted: January 12, 2020 Revised: January 25, 2020 Accepted: January 26, 2020

Introduction

Over the past three decades, internet addiction has been a popular topic of research among scholars. Most of these studies have focused on generalized internet addiction or specific online addictions such as social media addiction, online gaming addiction, gambling addiction, online shopping addiction, and online sex addiction (Sindermann, Sariyska, Lachmann, Brand, & Montag, 2018). However, there is a growing online activity neglected by scholars that attracts millions of internet users each day: mukbang. Mukbang is the combination of the South Korean words 'eating' (meokneun) and 'broadcast' (bangsong) that refers to online eating shows where an individual (i.e.,

mukbanger, broadcast jokey) eats a large portion of food while interacting with viewers (Donnar, 2017).

A recent scoping review study by the present authors indicated that individuals watch mukbang for different reasons, including eating, social, sexual, entertainment, and escapist motivations, and that based on anecdotal evidence, recreational mukbang watching might turn into addictive mukbang watching for a minority of individuals (Kircaburun, Harris, Calado, & Griffiths, 2020a). A recent cross-sectional study with 236 mukbang viewers demonstrated that some individuals may be at risk for mukbang watching addiction, and that addictive mukbang watching was moderately

related to daily time spent watching mukbang (Kircaburun et al., 2020b). However, there is a paucity of research examining addictive mukbang watching and its predictors. The proposed study outlined in the present protocol paper aims to investigate the motivational and psychological risk factors that have consistently shown to be associated with and/or co-occur with addictive use of different online activities, including online gaming addiction, social media addiction, and online sex addiction (Blasi et al., 2019; Bolshinsky & Gelkopf, 2019; Cashwell, Giordano, King, Lankford, & Henson, 2017; Kircaburun, Alhabash, Tosuntaș, & Griffiths, 2018; Şalvarlı & Griffiths, 2019). More specifically, the proposed study will examine the predictive role of mukbang watching motives, emotion regulation, impulsivity, and psychiatric distress (i.e., depression, anxiety, stress) on addictive mukbang watching.

Addictive mukbang watching and mukbang watching motives

Individuals engage in different activities with different motivations and purposes. motivations have been reported in other addictive online activities that may also be applicable to mukbang watching. For instance, Demetrovics et al. (2011) identified seven motivations that led individuals to play online videogames, including escape. competition, coping. development, fantasy, and recreational reasons. Another study by Horzum (2016) outlined seven motivations for social media use, comprised of maintaining existing relationships, meeting new people and socializing, expressing or presenting more popular self, passing time, entertainment, task management, and informational and educational uses. There is a paucity of research specifically related to mukbang watching motives, therefore empirical research is needed.

Uses and gratifications theory (UGT; Blumler & Katz, 1974) can help explain the motivational factors that result in online activity engagement. According to UGT, individuals' preference for a specific activity is shaped by their needs (Smock, Ellison, Lampe, & Wohn, 2011). Internet users attempt to gratify such needs using specific online applications, which result in behavior change and continuous use (Lee & Ma, 2012). Furthermore, specific gratifications obtained from using the activity can sometimes be associated with the development and maintenance of pathological use

of that activity (Ryan, Chester, Reece, & Xenos, 2014). Therefore, examining motivations for mukbang watching might help understand addictive mukbang watching, just as it has been researched among other types of behavioral addictions. For instance, a study by Süral, Griffiths, Kircaburun, and Emirtekin (2019) found that using social media self-expression, escapist. for social. entertainment motivations were positively associated with social media addiction. In another study, escape and competition motives were associated with internet gaming disorder (Kircaburun et al., 2019). Finally, coping and social motives have been associated with compulsive internet use for cybersex (Brahim, Rothen, Bianchi-Demicheli. Courtois. & Khazaal. 2019). Consequently, it is important to examine the motivational determinants of addictive mukbang watching to understand this behavior.

Addictive mukbang watching and emotion regulation

Emotion regulation can be referred to as an individual's capacity to regulate their emotions and control the expression and experience of the emotions they feel (Gross, 2002). A higher level of emotional dysregulation is an important factor that increases the likelihood of engaging in risky behaviors. For instance, individuals with low emotional regulation report higher levels of addictive gambling, gaming, social media use, and internet use (Gutiérrez, Fernández, Gonzalvo, & Bilbao, 2014; Hormes, Kearns, & Timko, 2014). A cross-sectional study with 472 high school and vocational school students aged 13-21 years found that emotion regulation was negatively associated with all addictive behaviors assessed, including alcohol and drug abuse, gambling disorder, video game addiction, and problematic internet use (Estevez. Jauregui, Sanchez-Marcos, Gonzales, & Griffiths, 2017). The authors argue that individuals experiencing increased difficulty in emotion regulation attempt to avoid or regulate negative feelings and emotions by engaging in addictive behaviors, due to challenges in controlling and dealing with their emotions and a lack of adaptive coping abilities (Estevez et al., 2017). Similarly, some individuals might try to regulate their emotions by watching others eat food and interacting by a shared common interest (e.g., food, eating) because mukbang videos promote positive feelings with their entertaining and amusing content (Donnar, 2017). Based on the aforementioned literature, it is expected that emotion regulation should be negatively associated with addictive mukbang watching.

Addictive mukbang watching and impulsivity

Impulsivity can be referred to as an individual acting without considering the outcomes of their actions (i.e., responding to stimuli without taking into account the possible negative results that may arise from it) Moeller, Barratt, Dougherty, Schmitz, & Swann, 2001). Impulsivity comprises several constructs, including negative urgency, lack of perseverance, lack of premeditation, sensation seeking, and positive urgency (Cyders, Littlefield, Coffey, & Karyadi, 2014). Previous studies have consistently found that impulsivity is associated with greater addiction to substance and alcohol use, as well as behavioral addictions including food addiction, gambling addiction, internet addiction, and gaming addiction (Choi et al., 2014; Evren, Dalbudak, Evren, & Ozen, 2019; Evren, Durkaya, Evren, Dalbudak, & Cetin, 2012; Evren et al., 2018; Lee et al., 2012; Pivarunas & Conner, 2015). Individuals with elevated impulse control problems might be suffering from diminished behavior inhibition, attention, and emotion regulation, in which these factors contribute to the excessive or uncontrolled use of online activities (Mazhari, 2012). The proposed study will be the first to investigate the role of impulsivity in addictive mukbang watching in order to examine whether addictive mukbang watching is associated with higher impulsivity. However, some evidence suggests that mukbang watching may become an impulsive behavior with its attractive features including social community, sexual fantasy, escape from unpleasant reality, and virtual eating and satiation (Kircaburun et al., 2020a).

Addictive mukbang watching and psychiatric distress

Psychiatric distress has often been characterized by unique but overlapping psychopathological problems including depression, anxiety, and stress (Norton, 2007). There is substantive empirical research demonstrating that individuals with increased psychiatric distress are vulnerable to elevated substance abuse and/or behavioral addictions, which is used as a maladaptive coping strategy in an attempt to modify their negative mood (Burrows, Kay-Lambkin, Pursey, Skinner, & Dayas, 2018). For example, depression was shown to be positively correlated with both social media

addiction and gaming addiction in a large-scale Norwegian study of over 23,000 individuals (Andreassen et al., 2016). Reward sensitivity and cognitive anxiety have been positively associated with excessive eating and compulsive buying (Davenport, Houston, & Griffiths, 2012). The 'selfmedication hypothesis' suggests that individuals engage in addictive behaviors in order to cope with tension related to psychological stress and/or to relieve symptoms of psychiatric distress (Goeders, 2003). Similar to other online activities, mukbang watching has been reported to be used as a positive mood modification and escape from negative mental states (Kircaburun et al., 2020a). Based on the aforementioned literature, it is expected that some individuals who successfully modify their psychiatric distress-related negative mood by watching online eating shows may turn into addictive mukbang watchers. Consequently, the main objective of the proposed study is to examine the association of mukbang watching motives, emotion regulation, impulsivity, and psychiatric distress with addictive mukbang watching.

Methods

Participants and procedure

Participants of this study will be recruited from social media mukbang groups and pages. The study will be promoted in different group pages to reach out to mukbang watchers. It is envisaged that the total sample of the study will exceed 1,000 mukbang viewers who regularly watch mukbang (preferably every day). Participants will be informed of the study's objectives in a participant information sheet. Those who read the information sheet and acknowledge that participation in the study is voluntary and anonymous will be able to continue filling out an online survey. The study protocol will be designed according to the guidelines of the Helsinki Declaration and be approved by the research team's university ethics committee.

Measures

Participants will complete an online survey that comprises demographic information, mukbang watching frequency, number of mukbang videos watched per day, and scores on the Mukbang Addiction Scale (Kircaburun et al., 2020b), Motives for Watching Mukbang Questionnaire (to be developed and validated in the scope of the proposed study), Difficulties in Emotion Regulation

Scale (Bjureberg et al., 2016), short form of the UPPS-P Impulsive Behavior Scale (Cyders et al., 2014), and short-form version of the Depression Anxiety Stress Scales (Henry & Crawford, 2005).

Mukbang Addiction Scale (MAS): The MAS (Kircaburun et al., 2020b) comprises six items on a five-point Likert scale (ranging from 1=very rarely to 5=very often) that assesses the risk of addictive mukbang watching (e.g., "How often during the last year have felt an urge to watch mukbang more and more?"). The MAS was developed by modifying the Bergen Facebook Addiction Scale (BFAS; Andreassen, Torsheim, Brunborg, & Pallasen, 2012). The BFAS reflects six core elements of addiction (i.e., salience. tolerance. modification, withdrawal, conflict, and relapse) outlined in the biopsychosocial framework of addiction (Griffiths, 2005).

Motives for Watching Mukbang Questionnaire (MWMQ): The MWMQ will be developed and validated during the course of the present study. Half of the collected participant data will be used for exploratory factor analysis (EFA). The remaining participant data will be used for confirmatory factor analysis (CFA) and correlational tests. The item pool for the scale development was developed by carrying out an extensive literature review of the possible motivations that drive people to watching mukbang (Kircaburun et al., 2020a). Furthermore, several studies that examined the motives for other types of online activity in the context of addictive behavior were also utilized (e.g., binge-watching, gaming, social networking). Consequently, 32 items reflecting seven different motivations formulated (i.e., eating, social, sexual, entertainment, escape, food discovery, and convenience motives).

Difficulties in Emotion Regulation Scale (DERS-16): The DERS-16 (Bjureberg et al., 2016) is a widely-used and psychometrically robust self-report measure that assesses four constructs of emotion regulation difficulties, including clarity (e.g., "I have difficulty making sense out of my feelings"), goals (e.g., "When I am upset, I have difficulty getting work done"), impulse (e.g., "When I am upset, I become out of control"), and strategies (e.g., "When I am upset, I believe that I will remain that way for a long time"). The scale comprises 16 items on a five-point Likert scale from 1 (almost

never) to 5 (*almost always*). Higher scores indicate lower ability to regulate emotions.

Short UPPS-P Impulsive Behavior Scale (SUPPS-P): The SUPPS-P (Cyders et al., 2014) comprises 20 items that assess five components of impulsivity, including negative urgency (e.g., "When I am upset I often act without thinking"), positive urgency (e.g., "I tend to lose control when I am in a great mood"), lack of premeditation (e.g., "I usually think carefully before doing anything" [reverse item]), lack of perseverance (e.g., "Unfinished tasks really bother me" [reverse item]), and sensation seeking (e.g., "I would like to learn to fly an airplane"). The items are scored on a four-point Likert scale from 1 (strongly disagree) to 4 (strongly agree). Higher scores indicate engaging in more impulsive behaviors.

Depression Anxiety Stress Scales (DASS-21): The DASS-21 (Henry & Crawford, 2005) comprises 21 items that assess three constructs of psychiatric distress, including depression (e.g., "I couldn't seem to experience any positive feeling at all"), anxiety (e.g., "I was aware of dryness of my mouth"), and stress (e.g., "I tended to over-react to situations"). The items are scored on a four-point Likert scale from 1 (never) to 4 (almost always). Higher scores indicate more psychiatric distress.

Statistical analysis

Statistical analyses will be carried out using SPSS and AMOS software. Initially, EFA and CFA will be applied to test the construct validity of the Motives for Watching Mukbang Questionnaire. In the CFA, goodness of fit values determined by Hu and Bentler (1999) will be used to evaluate scale fit. Accordingly, root mean square residuals (RMSEA) and standardized root mean square residuals (SRMR) lower than .05 and .08 will suggest adequate and good fit, respectively. Furthermore, comparative fit index (CFI) and goodness of fit index (GFI) higher than .90 and .95 will suggest adequate and good fit, respectively. Second, frequency, descriptives, and Pearson's correlation test will be used to determine the ratios, mean scores, and correlation coefficients of the study variables. Moreover, hierarchical regression analysis will be applied by including addictive mukbang watching as the outcome variable and mukbang watching motives, emotion regulation, impulsivity, and psychiatric distress as predictor variables.

Discussion

The objectives of this study are to (i) develop and validate a questionnaire that will assess motivations for watching mukbang, and (ii) examine the predictor role of motives for watching mukbang, emotion regulation, impulsivity, and general on mukbang psychiatric distress watching addiction. The proposed study will be the first to use a large sample of mukbang viewers who watch mukbang regularly (preferably every day) in order to comprehensively examine the motivational and psychiatric determinants of addictive mukbang watching. Addictive mukbang watching is a new area of psychological study that has drawn very little empirical investigation to date among researchers. As emphasized by the extant research examining other behavioral addictions, the selected risk factors (i.e., motivations, emotion regulation, impulsivity, psychiatric distress) are important markers of addictive use of online activities including social media, gaming, sex, eating, and internet use (Andreassen et al., 2016; Davenport et al., 2012; Estevez et al., 2017; Evren et al., 2012, 2018, 2019; Hormes et al., 2014; Ryan et al., 2014). Investigating well-established psychological risk factors found in other online behavioral addictions will help provide important preliminary evidence on whether mukbang watching has the potential to be a pathological behavior. It is expected that a significant relationship will be found between the aforementioned risk factors and addictive mukbang watching, which will provide important benchmark evidence. This study will contribute to the literature by being one of the first empirical studies examining mukbang watching addiction with the additional aim of stimulating further studies on the topic.

References

Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors*, 30, 252-262.

Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook addiction scale. *Psychological Reports*, *110*, 501-517.

Blasi, M. D., Giardina, A., Giordano, C., Coco, G. L., Tosto, C., Billieux, J., & Schimmenti, A. (2019). Problematic video game use as an emotional coping strategy: Evidence from a sample of MMORPG gamers. *Journal of Behavioral Addictions*, 8, 25-34.

Blumler, J. G., & Katz, E. (1974). The uses of mass communications: Current perspectives on gratifications research. Beverly Hills, CA: SAGE.

Bolshinsky, V., & Gelkopf, M. (2019). Motives and risk factors of problematic engagement in online sexual activities. *Sexual Addiction & Compulsivity*, 26, 262-292.

Brahim, F. B., Rothen, S., Bianchi-Demicheli, F., Courtois, R., & Khazaal, Y. (2019). Contribution of sexual desire and motives to the compulsive use of cybersex. *Journal of Behavioral Addictions*, 8, 442-450.

Bjureberg, J., Ljótsson, B., Tull, M. T., Hedman, E., Sahlin, H., Lundh, L. G., ... & Gratz, K. L. (2016). Development and validation of a brief version of the difficulties in emotion regulation scale: The DERS-16. *Journal of Psychopathology and Behavioral Assessment*, 38, 284-296.

Burrows, T., Kay-Lambkin, F., Pursey, K., Skinner, J., & Dayas, C. (2018). Food addiction and associations with mental health symptoms: A systematic review with meta-analysis. *Journal of Human Nutrition and Dietetics*, 31, 544-572.

Cashwell, C. S., Giordano, A. L., King, K., Lankford, C., & Henson, R. K. (2017). Emotion regulation and sex addiction among college students. *International Journal of Mental Health and Addiction*, 15, 16-27.

Choi, S. W., Kim, H., Kim, G. Y., Jeon, Y., Park, S., Lee, J. Y., ... & Kim, D. J. (2014). Similarities and differences among Internet gaming disorder, gambling disorder and alcohol use disorder: A focus on impulsivity and compulsivity. *Journal of Behavioral Addictions*, *3*, 246-253.

Cyders, M. A., Littlefield, A. K., Coffey, S., & Karyadi, K. A. (2014). Examination of a short English version of the UPPS-P Impulsive Behavior Scale. *Addictive Behaviors*, *39*, 1372-1376.

Davenport, K., Houston, J. E., & Griffiths, M. D. (2012). Excessive eating and compulsive buying behaviours in women: An empirical pilot study examining reward sensitivity, anxiety, impulsivity, self-esteem and social desirability. *International Journal of Mental Health and Addiction*, 10, 474-489.

Demetrovics, Z., Urbán, R., Nagygyörgy, K., Farkas, J., Zilahy, D., Mervó, B., ... & Harmath, E. (2011). Why do you play? The development of the motives for online gaming questionnaire (MOGQ). *Behavior Research Methods*, *43*, 814-825.

Donnar, G. (2017). 'Food porn' or intimate sociality: Committed celebrity and cultural performances of overeating in meokbang. *Celebrity Studies*, 8, 122-127.

Estevez, A., Jauregui, P., Sanchez-Marcos, I., Lopez-Gonzalez, H., & Griffiths, M. D. (2017). Attachment and emotion regulation in substance addictions and behavioral addictions. *Journal of Behavioral Addictions*, 6, 534-544.

Evren, C., Alniak, I., Karabulut, V., Cetin, T., Umut, G., Agachanli, R., & Evren, B. (2018). Relationship of probable attention deficit hyperactivity disorder with severity of psychopathology and impulsivity in a sample of male patients with opioid use disorder. *Psychiatry Investigation*, 15, 164-171.

Evren, B., Dalbudak, E., Evren, C., & Ozen, S. (2019). The relationship of internet addiction symptom severity with posttraumatic stress disorder symptoms and impulsivity among Turkish university students. *Psychiatry and Clinical Psychopharmacology*, 29, 83-89.

Evren, C., Durkaya, M., Evren, B., Dalbudak, E., & Cetin, R. (2012). Relationship of relapse with impulsivity, novelty seeking and craving in male alcohol-dependent inpatients. *Drug and Alcohol Review*, *31*, 81-90.

Goeders, N. E. (2003). The impact of stress on addiction. *European Neuropsychopharmacology*, 13, 435-441.

Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance Use*, 10, 191-197.

Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology*, *39*, 281-291.

Gutiérrez, A. E., Fernández, D. H., Gonzalvo, I. S., & Bilbao, P. J. (2014). El papel mediador de la regulación emocional entre el juego patológico, uso abusivo de Internet y videojuegos y la sintomatología disfuncional en jóvenes y adolescentes. *Adicciones*, 26, 282-290.

Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*, 44, 227-239.

Hormes, J. M., Kearns, B., & Timko, C. A. (2014). Craving Facebook? Behavioral addiction to online social networking and its association with emotion regulation deficits. *Addiction*, 109, 2079-2088.

Horzum, M. B. (2016). Examining the relationship to gender and personality on the purpose of Facebook usage of Turkish university students. *Computers in Human Behavior*, 64, 319-328.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*, 1-55.

Kircaburun, K., Alhabash, S., Tosuntaş, Ş. B., & Griffiths, M. D. (2018). Uses and gratifications of problematic social media use among university students: A simultaneous examination of the Big Five of personality traits, social media platforms, and social media use motives. *International Journal of Mental Health and Addiction*. Advance online publication. https://doi.org/10.1007/s11469-018-9940-6.

Kircaburun, K., Demetrovics, Z., Griffiths, M. D., Király, O., Kun, B., & Tosuntaş, Ş. B. (2019). Trait emotional intelligence and internet gaming disorder among gamers: The mediating role of online gaming motives and moderating role of age groups. *International Journal of Mental Health and Addiction*. Advance online publication. https://doi.org/10.1007/s11469-019-00179-x.

Kircaburun, K., Harris, A., Calado, F., & Griffiths, M. D. (2020a). The psychology of mukbang watching: A scoping review of the academic and non-academic literature. *International Journal of Mental Health and Addiction*. Advance online publication. https://doi.org/10.1007/s11469-019-00211-0.

Kircaburun, K., Stavropoulos, V., Harris, A., Calado, F., Emirtekin, E., & Griffiths, M. D. (2020b). Development and validation of the Mukbang Addiction Scale. *International Journal of Mental Health and Addiction*. Advance online publication. https://doi.org/10.1007/s11469-019-00210-1.

Lee, H. W., Choi, J. S., Shin, Y. C., Lee, J. Y., Jung, H. Y., & Kwon, J. S. (2012). Impulsivity in internet addiction: A comparison with pathological gambling. *Cyberpsychology, Behavior, and Social Networking*, 15, 373-377.

Lee, C. S., & Ma, L. (2012). News sharing in social media: The effect of gratifications and prior experience. *Computers in Human Behavior*, 28, 331-339.

Mazhari, S. (2012). Association between problematic Internet use and impulse control disorders among Iranian university students. Cyberpsychology, Behavior, and Social Networking, 15, 270-273.

Moeller, F. G., Barratt, E. S., Dougherty, D. M., Schmitz, J. M., & Swann, A. C. (2001). Psychiatric aspects of impulsivity. *American Journal of Psychiatry*, 158, 1783-1793.

Norton, P. J. (2007). Depression Anxiety and Stress Scales (DASS-21): Psychometric analysis across four racial groups. *Anxiety, Stress, and Coping*, 20, 253-265.

Pivarunas, B., & Conner, B. T. (2015). Impulsivity and emotion dysregulation as predictors of food addiction. *Eating Behaviors*, 19, 9-14.

Ryan, T., Chester, A., Reece, J., & Xenos, S. (2014). The uses and abuses of Facebook: A review of Facebook addiction. *Journal of Behavioral Addictions*, *3*, 133-148.

Sindermann, C., Sariyska, R., Lachmann, B., Brand, M., & Montag, C. (2018). Associations between the dark triad of personality and unspecified/specific forms of Internet-use disorder. *Journal of Behavioral Addictions*, 7, 985-992.

Smock, A. D., Ellison, N. B., Lampe, C., & Wohn, D. Y. (2011). Facebook as a toolkit: A uses and gratification approach to unbundling feature use. *Computers in Human Behavior*, *27*, 2322-2329.

Süral, I., Griffiths, M. D., Kircaburun, K., & Emirtekin, E. (2019). Trait emotional intelligence and problematic social media use among adults: The mediating role of social media use motives. *International Journal of Mental Health and Addiction*, 17, 336-345.

Şalvarlı, Ş. İ., & Griffiths, M. D. (2019). The association between internet gaming disorder and impulsivity: A systematic review of literature. *International Journal of Mental Health and Addiction*. Advance online publication. https://doi.org/10.1007/s11469-019-00126-w.

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