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# Addictive Behaviors Reports

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## Editorial

### Binge behaviors: Assessment, determinants, and consequences

#### 1. Introduction

In the current context of ubiquitous access to various types of substances, content, and devices, binge forms of behavior, which may be described as a strong propensity to implement or repeat a certain behavior in a short period of time (e.g., drinking large quantities of alcohol on one occasion, eating large amounts of food within a short time frame, watching multiple episodes of a TV series in one session), constitute an important topic of mutual interest to researchers and health and social workers.

Such consumption patterns, centrally characterized by excessiveness and loss of control, are commonplace in Western society, as reflected by the elevated or increasing prevalence rates of most common binge behaviors such as binge drinking (18.2%; [World Health Organization, 2018](#)), binge eating (0.3% to 4.5%; [Hudson et al., 2007](#); [Sonneville et al., 2013](#)), binge watching (72%; [Flayelle et al., 2020](#)), or binge-porn consumption (0.8% to 8%; [Ballester-Arnal et al., 2016](#); [Böthe et al., 2020](#); [Ross et al., 2012](#)). Although binge behaviors are usually initiated for recreational purposes, they may lead to harmful consequences. Bingeing is indeed associated with a variety of health problems (e.g., obesity, diabetes, alcoholic cirrhosis, thrombosis and pulmonary embolism; [Fazzino et al., 2017](#); [Rangarajan & Forman, 2019](#); [Udo & Grilo, 2019](#); [Ventura-Cots et al., 2017](#)), sleep disruption ([Exelmans & Van den Bulck, 2017](#)), impaired cognitive and emotional functioning ([Carbia et al., 2018](#); [Lannoy et al., 2021](#)), decreased academic and work performance ([Jennison, 2004](#); [Kuntsche et al., 2017](#); [Pawaskar et al., 2017](#); [Rubenking et al., 2018](#)), increased risky behaviors (e.g., unsafe sexual behaviors; [Hingson et al., 2017](#); [Townshend et al., 2014](#); [Wéry et al., 2016](#)), social and relationship disturbances ([Vaterlaus et al., 2019](#); [Werner et al., 2018](#)), and, more globally, reduced quality of life ([Rieger et al., 2005](#)). As a result, unmoderated and unrestrained indulgence in binge behaviors can ultimately lead to severe and potentially long-lasting effects on a person's physical, psychological, and social health, thus posing a serious public health concern.

Given their high prevalence and possible detrimental effects, some binge behaviors have received considerable research interest (specifically food and alcohol over-intake), whereas others constitute a topic of increasing research (binge watching or binge porn). However, little is known about the commonalities and differences between binge patterns of behaviors that seem to display overlapping characteristics and similar consequences (for associations between binge eating and binge drinking, see, e.g., [Escrivá-Martínez et al., 2020](#); [Ferriter & Ray, 2011](#); [Inguglia et al., 2019](#); [Laghi et al., 2014](#); [Stickley et al., 2015](#)). The identification of common underlying psychological processes between binge behaviors suggests that at-risk individuals may develop several

forms of excessive behaviors, crucial information from both a public health and a clinical perspective. Enhancing our understanding of the commonalities and differences underlying binge behaviors is, therefore, a critical issue. More research efforts into binge behaviors are needed, in particular those that target currently less studied behaviors (e.g., binge-porn consumption). Some of the main areas of work in this respect notably relate to (1) the development of valid and improved measures of binge behaviors; (2) the identification of plausible transdiagnostic psychological mechanisms ([Dudley et al., 2011](#); [Kinderman, 2005](#); [Kinderman & Tai, 2007](#)) that would provide information on the onset, continuation, and recurrence of binge behaviors; and (3) the recognition of the consequences of binge behaviors according to type of bingeing, possible co-occurrence of behaviors, and individuals' sociodemographic characteristics.

The invitation to submit papers for the current Special Issue entitled “*Binge behaviors: Assessment, determinants, and consequences*” falls within this perspective, being dedicated to the highlighting of original studies that give such new impetus and directions to the understanding of, and research on, the psychology of binge behaviors.

#### 2. Summary of the current Special Issue

This Special Issue gathers 11 original research and review articles that address different types of binge behaviors: binge drinking ([Deniel et al., 2021](#); [Gierski et al., 2020](#); [Herman et al., 2020](#); [Mange et al., 2021](#); [Werle et al., 2021](#)), binge eating ([Prunell-Castañé et al., 2021](#); [Werle et al., 2021](#)), binge watching ([Cordeiro et al., 2021](#); [Ort et al., 2021](#); [Rubenking & Bracken, 2021](#); [Werle et al., 2021](#)), and binge-porn consumption (i.e., hypersexuality and problematic pornography use; [Castro-Calvo et al., 2021](#); [Koós et al., 2021](#)). These articles primarily consist of empirical studies that build on self-report questionnaires, but a few rely on behavioral assessments, ecological approaches (i.e., sampling experiences), or literature reviews. Bringing together perspectives from clinical psychology, media effects research, or human-computer interaction, the topics covered across this series of articles cluster around the core dimensions of assessment, psychological determinants (and prevalence), and consequences of binge behaviors, which we briefly introduce below.

The design and validation of two binge behavior-related assessment instruments are presented in this Special Issue. [Koós et al. \(2021\)](#) demonstrate the psychometric validity and reliability of the Hypersexual Behavior Consequence Scale (HBCS) to assess the severity and adverse consequences of binge-porn consumption (i.e., hypersexuality), a quantitative tool that can be used either in self-report studies or in clinical settings to dissect specific areas of impairment. Furthermore,

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although research on binge watching has to date been based solely on self-report assessments, it seems important to highlight the contribution of [Cordeiro et al. \(2021\)](#), who demonstrate the reliability, accuracy, and usability of the Binge-Watching Data Analysis Tool (BWDAT), the first available open-access instrument to collect both subjective (i.e., self-reported data) and objective (i.e., viewers' physiological data and interactions with video-on-demand (VOD) interfaces) data related to binge viewing experiences on VOD platforms.

In addition, most of the articles included in this Special Issue (6 of 11) contribute to a better understanding of the psychological processes (i.e., cognitive, affective, motivational, and interpersonal) involved in the etiology, development, and maintenance of binge behaviors. Through dominance analysis, [Mange et al. \(2021\)](#) demonstrate that binge drinking appears to be mainly determined by enhancement motives and drinking identity, followed by subjective norm and social motives, thus calling for the focus of attention to be placed on interindividual psychological factors for the sake of elaborating prevention strategies. Other potential targets for prevention and intervention are also suggested by [Herman et al. \(2020\)](#), who highlight the combined role of difficulties in emotion processing (i.e., alexithymia) and trait impulsivity in binge drinking among university students. Three review articles then provide an updated overview on cognitive impairments associated with binge behaviors. [Prunell-Castañé et al. \(2021\)](#) perform a preregistered meta-analysis that examines the link between executive functions and both clinical and nonclinical levels of binge eating behaviors. Although their findings suggest no association between performance in general executive functions and uncontrolled eating patterns in nonclinical populations, they reveal modest deficits in executive functions in individuals who meet the diagnostic criteria for a binge eating disorder. In a systematic review on cognitive processes related to problematic pornography use, [Castro-Calvo et al. \(2021\)](#) identify a set of distorted mechanisms (i.e., attentional biases toward sexual stimuli, deficient inhibitory control, impaired performance in tasks assessing working memory, and decision-making difficulties) as sensitive indicators of binge-porn consumption. Finally, in their mini-review that examines incentive sensitization across binge behaviors and relies on event-related potentials, [Werle et al. \(2021\)](#) emphasize preliminary results suggesting altered attentional processing of incentive stimuli across a variety of binge behaviors (i.e., binge forms of drinking, eating, gaming, and gambling), which might thus constitute a possible shared underlying mechanism of bingeing. As a recent phenomenon of interest in this Special Issue, [Rubenking and Bracken \(2021\)](#) report on the exponential growth rate of binge watching practices (together with the decrease in traditional appointment-style TV series viewing) over the last 5 years (i.e., 2015–2020), thus suggesting the normalization of binge watching behavior that appears to remain nonproblematic for most viewers. [Ort et al. \(2021\)](#), however, emphasize the distinctive role of certain motivations to engage in binge watching (i.e., escapism, loneliness, stimulation, social interaction, and learning) in facilitating the development of dysfunctional patterns of involvement in this activity. This underscores the necessity to differentiate between high versus problematic involvement in binge watching ([Flayelle et al., 2020](#); [Steins-Loeber et al., 2020](#)).

Finally, the remaining investigators in this Special Issue explore binge drinking-related consequences through neuropsychological assessments. Examining memory processes, [Gierski et al. \(2020\)](#) show impaired storage and recollection processes in verbal episodic memory, although no evidence was found for difficulties in verbal working memory. This finding clearly indicates that binge drinking should not be considered a recreational pattern and could shed light on how short-term binge drinking already affects academic performance ([Kuntsche et al., 2017](#); [Páramo et al., 2020](#); [Patte et al., 2017](#)). In a similar vein, [Deniel et al. \(2021\)](#) highlight the harmful additive effect of cannabis use and binge drinking on cognition. The authors observed not only poorer neuropsychological performance among binge drinkers in comparison with light drinkers (whether they used cannabis or not), but also specific

impairments in flexibility, episodic memory, and working memory among binge drinkers who used cannabis.

### 3. Conclusion

In addition to these conceptual and methodological contributions to furthering the understanding of the psychological determinants and consequences of binge behaviors, the empirical studies and reviews published in this Special Issue offer promising avenues for reflection on potentially beneficial transdiagnostic interventions and early prevention strategies. In support of this very objective, establishing convergent and divergent mechanisms across binge patterns of behaviors is an approach worth pursuing to help determine a process-centered overarching framework that could account for their etiological commonalities and differences, considering that there remain important concrete challenges to be addressed in this clarification effort (e.g., lack of a consensual definition of certain binge behaviors, i.e., binge drinking and binge watching; [Flayelle et al., 2020](#); [Kuntsche et al., 2017](#); [Lannoy et al., 2021](#)). A continuous effort to identify the consequences of binge behaviors will also aid the development of this research field.

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