

## HABILITATION THESIS REVIEWER'S REPORT

**Masaryk University**

**Faculty**

**Procedure field**

**Applicant**

**Applicant's home unit,  
institution**

**Habilitation thesis**

**Reviewer**

**Reviewer's home unit,  
institution**

Faculty of Social Studies

Social Psychology

Mgr. Lukas Blinka, Ph.D.

Masaryk University, Faculty of Social Studies

Excessive Internet Use and Internet Gaming Addiction

Prof. Dr. Leonard Reinecke

Johannes Gutenberg University Mainz, Germany

Department of Communication

The use of the Internet and digital media has seen unprecedented growth over the past decade. Mobile Internet connections and mobile devices in general as well as smartphones in particular provide access to online communication and content at any time and any place. Constant connectedness and a condition of being permanently online and permanently connected to a large network of online friends and acquaintances has become the “new normal”. These new technological possibilities in combination with strong social norms and growing social pressure demanding for constant availability have increased the fear of dysfunctional forms of use that may endanger the physical and psychological health of individual users. While public and academic concerns regarding maladaptive and potentially pathological, addiction-like forms of Internet use have already emerged in the early days of Internet use in the 1990ies, the new technological developments described above make questions pertaining to the predictors and consequence of excessive and problematic Internet and videogame use a particularly pressing task for research in health and media psychology as well as media effects research. Adolescents represent a particularly vulnerable group of users of new information technologies: not only are they particularly keen users of mobile and social media as well as video and computer games. They are also confronted with a plethora of developmental tasks and challenges, such as identity and personality development, that may make adolescents particularly susceptible to the potentially detrimental effects of excessive and problematic forms of media use. A better understanding of the protective and risk factors that are connected to maladaptive forms of Internet and game use in the population of adolescents is thus of utmost importance.

The research conducted by Dr. Lukus Blinka in the context of his habilitation project is at the very heart of the issues described above. His work thus addresses a cutting-edge research area with highest relevance both for psychological science as well as the society at large. Dr. Blinka has submitted an impressive body of work for his habilitation. Together with his research collaborators, he has addressed the predictors and outcomes of excessive and problematic forms of Internet and game use over the course of multiple empirical investigations, resulting in a body of nine papers and research reports, all published in international peer-reviewed journals. In combination, the nine papers make a major

contribution to previous research in the area of excessive Internet and game use by revealing a number of risk factors associated with a heightened susceptibility for problematic forms of use on the *individual* (e.g., impulsivity and self-control, see Study I, II, and V), *social* (e.g., peer relations and family conflicts, see Study VIII and IX), and *media/technology use* (e.g., breadth of Internet use practices and activities, see Study III) level. Over the past years, the research area of problematic Internet use has evolved from simple direct effects models of addictive media use to more complex theoretical models that underline that excessive and problematic media use can only be successfully addressed as the interplay of multiple and mutually reinforcing factors and mechanism (e.g., Müller et al., 2016). Better understanding the nomological network of the construct of excessive and addictive forms of technology use is thus a major task for theory development in this field. Based on the multitude of addressed predictor variables, the habilitation project makes an important step in that direction and thus provides a *remarkable theoretical contribution* in this research field.

In addition to the aforementioned theoretical contribution that mainly manifests in the form of the further elaboration and extension of existing and established theoretical models describing risk and resilience factors for problematic use, the habilitation project also makes *significant programmatic contributions* by providing methodological and theoretical impulses for future research. One central contribution refers to the development of a novel empirical measure of problematic use, the Excessive Internet Use Scale, that has been used in six of the nine studies submitted within the habilitation project. As the development of valid operationalizations of excessive and problematic use represents a key challenge for this field of research (e.g., Kardefelt-Winther, 2014), this scale construction provides an important methodological resource for future studies. Furthermore, the habilitation project provides innovative impulses by addressing risk- and resilience factors that have received little attention in previous research (e.g., the role of sleep quality, see Study VI). Furthermore, the project is the first to systematically address problem neighbourhoods (Study VIII and IX) as a social level risk factor for problematic technology use, suggesting the relevance of this social background variable for future research.

Beyond its theoretical merit, the submitted research program also has a number of *important practical implications*. Given the negative outcomes potentially associated with excessive technology use, potential treatment and intervention programs are of utmost importance. To provide and develop preventive measures and effective treatment, two important preconditions need to be addressed: 1) It is important to understand the central mechanisms that increase the individual susceptibility for the development of problematic usage patterns and that need to be addressed in treatment. Furthermore, 2) identifying sub-population of adolescents that are particularly at risk is paramount for an effective targeting of preventive measures. The habilitation project provides novel impulses in both areas. First, among several of the nine published papers (Study I, II, IV, V, and IX), impulsivity or related constructs such as reduced self-control, ADHD, conduct problems and learning disabilities emerged as central risk factors for excessive technology use, suggesting that impulsivity may be a promising target for clinical intervention. With regard to social context factors that differentiate between more resilient and at-risk populations of adolescents, the habilitation project identifies problematic neighbourhoods as a central risk-factor, thus underlining the merit of intervention programs targeting local populations of adolescents.

Finally, and in addition to its remarkable theoretical, programmatic and practical contributions, the submitted work is characterized by *empirical and methodological excellence*. The papers and analyses are based on a number of large, representative datasets of highest quality. Studies I-III made use of a very large sample ( $N > 25,000$  participants) of adolescent aged 9-16 years from 25 European countries collected in the EU Kids Online II project. Furthermore, studies IV, VI, VIII, and IX were based on data from the Health Behaviour in School-aged Children project (HBSC), a representative sample of  $N > 7,500$  adolescents from Slovakia. Finally, studies V ( $N = 1,463$ ) and VII ( $N = 3,952$ ) used data collected by Dr. Blinka based on a sample of Czech and Slovak online gamers. In combination, these large-scale datasets provide a unique basis for analysis. Given that the prevalence of excessive gaming in the general population is low and may differ substantially across countries, the large, representative, and regionally heterogeneous data provided in the habilitation project represent a major methodological asset and further emphasize the contribution the project makes to this research field.

Besides the remarkable strengths discussed above, a number of limitations of the habilitation project need to be noted. First, the project does not provide any impulses with regard to the theoretical explication of excessive or pathological Internet or game use. In fact, the definition and operationalization of these concepts as well as the question whether generalized Internet addiction (rather than more specific forms of excessive use of individual online services or platforms) actually exists, is highly disputed (e.g., Kardefelt-Winther, 2014; Kardefelt-Winther et al., 2017). The habilitation, however, only addresses these fundamental issues very superficially. A more critical theoretical evaluation of the construct of Internet addiction would have further strengthened the contribution of the project. Also, none of the studies explicitly addresses the conceptualization of excessive use empirically. However, the project contributes to concept explication implicitly by demonstrating a co-morbidity between excessive use and different forms of substance abuse, suggesting a statistical relationship between addictive forms of media use and more classic substance-based forms of addictions. Besides these conceptual limitations, the project also shows a few methodological limitations. While the development of the Excessive Internet Use Scale by the author is a major contribution, the scale has not been systematically validated and their psychometric properties not tested in detail yet. This is an important task for future research. Furthermore, the measurement of excessive use was not fully consistent in all studies. While the majority of studies relied on the Excessive Internet Use Scale, others (e.g., Study IV) merely used usage frequency measures to assess excessive use. It remains unclear, however, whether this represents a valid operationalization of excessive use and makes comparison between studies more difficult. Finally, while some of the studies provide indirect information concerning the development of excessive media use (on the population level) over time (see Study III), none of the analyses are based on longitudinal data. As a consequence, causality and the direction of the reported statistical effects remain largely unclear.

Overall, however, the strengths of the project clearly exceed the limitations. Dr. Lukas Blinka has submitted an impressive collection of studies that make an important and significant theoretical and programmatic contribution to research on excessive and pathological technology use. The findings significantly extend our understanding of the risk and resilience factors underlying problematic Internet use and provide important practical

impulses for treatment and intervention. The project clearly and fully fulfils the requirements expected of a habilitation and I strongly and unanimously recommend acceptance of Dr. Blinka's habilitation thesis.

**Reviewer's questions for the habilitation thesis defence** (number of questions up to the reviewer)

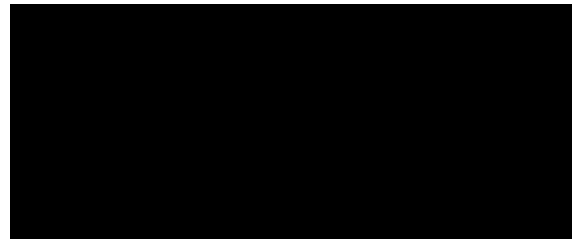
No questions are submitted, as the reviewer will not participate in the habilitation thesis defence.

### Conclusion

The habilitation thesis entitled "Excessive Internet Use and Internet Gaming Addiction" by Lukas Blinka **fulfils** requirements expected of a habilitation thesis in the field of Social Psychology.

Date: 22.01.2021

Signature:



### References:

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Kardefelt-Winther, D., Heeren, A., Schimmenti, A., van Rooij, A., Maurage, P., Carras, M., . . . Billieux, J. (2017). How can we conceptualize behavioural addiction without pathologizing common behaviours? *Addiction*, 112, 1709-1715. doi: 10.1111/add.13763

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