

HABILITATION THESIS REVIEWER'S REPORT

Masaryk University

Faculty

Faculty of Social Studies

Applicant

Mgr. David Lacko, Ph.D.

Habilitation thesis

Adolescents and Information and Communication Technologies: Effects on Digital Engagement and Well-Being

Reviewer

doc. PhDr. Alena Slezáčková, Ph.D.

Reviewer's home unit, institution

Department of Medical Psychology and Ethics, Faculty of Medicine, Masaryk University

The submitted habilitation thesis presents a comprehensive, methodologically rigorous, and conceptually sophisticated body of research examining the complex relationships between adolescents' engagement with information and communication technologies (ICTs) and their well-being. The thesis is based on a collection of eight previously published studies, accompanied by an integrative commentary that synthesises their findings within a coherent theoretical framework.

Structure and Content of the Thesis

The thesis is structured in a clear and logically coherent manner. It begins with a theoretically grounded discussion of developmental processes in adolescence and their reciprocal relationship with digital technology use. This is followed by a focused review of research on ICT effects on adolescent well-being, addressing key domains such as credibility, sleep, body image, aggression and empathy, and loneliness and depression.

A central conceptual contribution is the author's use and further development of the Integrative Model of ICT Effects on Adolescent Well-being (iMEW), complemented by Self-Determination Theory (SDT) and the General Aggression Model (GAM). These frameworks provide a robust theoretical foundation for the empirical work.

The eight empirical studies are presented in a structured and transparent manner, including a clear description of the author's contribution, research questions, and methodology. The studies employ a wide range of quantitative designs, including cross-sectional, experimental, longitudinal, and intensive longitudinal approaches, and are organised around five thematic domains: digital engagement, perceived credibility, quality of sleep, depression and loneliness, and aggression and empathy.

The thesis draws on a wide range of relevant and up-to-date scholarly sources, reflecting a strong engagement with current international research and ensuring that the work is well anchored in contemporary theoretical and empirical debates. It culminates in an integrative discussion that synthesises findings across studies and articulates broader theoretical, methodological, and applied implications.

Regarding Study 5, it may be noted that the Czech version of the Body Appreciation Scale-2 was recently included in a large-scale cross-cultural study (Swami et al., 2023; <https://doi.org/10.1016/j.bodyim.2023.07.010>), examining measurement invariance across 65 nations and 40 languages. Given the timing of publication, this does not diminish the contribution of the present validation study, but it may provide a useful complementary context for interpreting the findings.

Strengths and Contributions of the Thesis

One of the most notable strengths of the thesis lies in its systematic and cumulative research design. The author does not present a set of isolated studies but rather develops a coherent and progressively refined research programme addressing key aspects of adolescents' digital lives.

A major conceptual contribution is the shift away from reductionist, screen-time-based approaches towards a context-sensitive, conditional, and bidirectional understanding of digital effects. The thesis convincingly demonstrates that digital engagement is not inherently harmful or beneficial but depends on the interaction between individual characteristics, contextual factors, and specific usage patterns.

Further key strengths include:

- Exceptional methodological sophistication, including the use of intensive longitudinal designs, multi-wave panel data, and experimental approaches. Particularly noteworthy is the application of random-intercept cross-lagged panel models (RI-CLPM), enabling a rigorous distinction between within-person and between-person effects.
- Advanced statistical modelling, encompassing MG-SEM, MG-CFA, latent interactions, GLMM, and equivalence testing, reflecting a high level of quantitative expertise.
- Strong commitment to research transparency and open science, including open datasets, R scripts, and preregistration of experimental studies.
- Integration of objective and subjective measures, such as trace data (e.g., smartphone logs) alongside self-reports, enhancing ecological validity and construct robustness.
- Empirical nuance and theoretical depth, particularly in demonstrating that adolescents are active agents whose digital engagement often reflects coping strategies, motivational processes, and pre-existing dispositions.
- Identification of key moderating factors, especially gender, which emerges as a fundamental moderator across several domains (e.g., social gaming, advertising credibility, body image).
- Societal relevance, as the findings challenge alarmist narratives and contribute to a more balanced, evidence-based understanding of digital media effects.

The empirical findings are particularly compelling in their consistency: across multiple domains (including sleep, aggression, and well-being) the results systematically challenge simplistic causal assumptions. For instance, smartphone use before sleep was not found to be uniformly detrimental, violent video game exposure did not causally increase aggression, and social gaming showed both beneficial and adverse effects depending on gender and context.

Taken together, the thesis demonstrates a high degree of scholarly maturity and positions the author as a leading contributor to contemporary debates on digital technology and adolescent development.

Limitations and Directions for Future Research

Despite its considerable strengths, several limitations should be acknowledged, many of which are explicitly recognised and thoughtfully discussed by the author. A key issue concerns the reliance on self-report measures and proxy indicators, which may not fully capture actual behaviours. Future research would benefit from incorporating more objective and behavioural data, such as trace logs or in-game interaction measures.

Some studies also rely on adapted or shortened instruments, which may affect measurement precision. In addition, while experimental designs strengthen causal inference, their ecological validity may be limited, highlighting the need for research in more naturalistic settings.

Future research should place greater emphasis on underlying psychological mechanisms (e.g., need satisfaction, social comparison) to move beyond documenting effects and explain how and why digital engagement influences well-being.

Importantly, the author acknowledges these limitations, and they do not detract from the overall quality of the thesis; rather, they demonstrate a high level of critical reflection and point to promising directions for future research.

Reviewer's questions for the habilitation thesis defence:

- Your findings consistently emphasise the conditional and context-dependent nature of ICT effects. Which psychological mechanisms do you consider most crucial in explaining these conditional effects across different domains?
- Gender emerged as a fundamental moderator in several studies. How do you theoretically interpret these gender differences, and how should they inform future research and intervention design?
- Your work highlights the importance of distinguishing between within-person and between-person effects. How should this distinction reshape the interpretation of earlier research based primarily on cross-sectional or between-person designs?

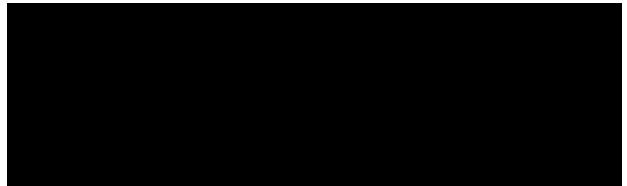
Conclusion

Through his work, the Dr. David Lacko establishes himself as a highly competent and internationally oriented scholar in the field of adolescent development and digital media research. The thesis demonstrates a high level of scientific independence, theoretical integration, and methodological advancement.

This work represents a substantial, original, and methodologically advanced contribution to the field of psychology, particularly in the domain of adolescent development in digital environments. It also demonstrates the author's ability to develop a coherent research programme, integrate multiple theoretical frameworks, and address complex and socially relevant questions with a high degree of methodological rigour.

To conclude, the habilitation thesis entitled "Adolescents and Information and Communication Technologies: Effects on Digital Engagement and Well-Being" by Mgr. David Lacko, Ph.D., clearly fulfils the requirements for a habilitation thesis in the field of Psychology, and I therefore recommend it for defence.

Date: March 11, 2026



Assoc. Prof. Alena Slezáčková, PhD.