

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

Dr. Kevin Koban, M.A.

Reviewer's home unit, institution

University of Vienna, Austria

Dear members of the habilitation board:

This review evaluates the scholarly merit of the habilitation thesis of Mgr. David Lacko, Ph.D., titled "*Adolescents and Information and Communication Technologies: Effects on Digital Engagement and Well-Being*". I am generally familiar with some of Dr. Lacko's work and have carefully read both the habilitation thesis as such and all publications directly attached to it (also including Lacko et al.'s [2026] very recent rebuttal of Teng and Bushman's [2026] criticism of one of them). I have further examined Masaryk University's evaluation criteria for this procedural step. Adopting a bird's-eye perspective on the given habilitation thesis as a whole, my general commentary will be structured as follows:

- (1) an overall assessment about where and how all included manuscripts were published,
- (2) more specific evaluations of
 - a. the current relevance of topics within and beyond academia
 - b. the theoretical approach regarding innovativeness and rigor,
 - c. the methodological approach with regard to quality, accuracy, and topicality,
- (3) a conclusive appraisal concerning intellectual maturity, scholarly prowess, and international recognition.

Following the supplied form, this review will conclude with a list of both overarching and publication-specific questions for the habilitation thesis defence (which address more nitty-gritty questions about study details that I found either noteworthy or in need for further justification) and a statement about whether I consider it meeting the requirements expected of habilitation theses in our field.

When looking at the total of eight publications included in this thesis and author contributions, it becomes immediately clear that all of them had been published in internationally well-recognized academic journals, from which all can be considered Q1 (e.g., according to Web of Science's Journal Impact Factors [JIF]), with the exception of the International Journal of Communication (which, however, has decent credibility irrespective of JIFs). Indicating a relatively broad disciplinary approach, said journals cover different subfields, namely, what I would regard as developmental (media) psychology (i.e., *Journal of Children and Media*, *Journal of Adolescence*), clinical (health) psychology (i.e., *Journal of Eating Disorders*),

media psychology (i.e., *Computers in Human Behavior*), and communication science (i.e., *International Journal of Communication, New Media and Society*).

Based on this portfolio (and considering his other national and international [co-]authorships not included here), it is clear to me that Dr. Lacko has gained an exceptionally strong, notably international and intersubdisciplinary academic profile. Having said that, it also needs to be noted that none of the included publications is single-authored, nor does it appear to be (if I'm not mistaken) that Dr. Lacko took up the role of the most senior researcher in any of them, which together poses a slight challenge to his independence as a researcher despite his unquestionably substantial contribution to each and every included study. Additionally, and I have to emphasize regardless of the actual quality of the manuscripts and without wanting to taint any of these well-regarded journals as substandard in any way, I somehow missed publications in prominent flagship journals in any of the respective subfields, which, however, surely will be targeted in due time particularly given Dr. Lacko's exemplary methodological rigor. To be frank, I think Studies 4, 6, and 8 would have actually deserved a more prominent placement than CHB.

Topically, Dr. Lacko's thesis can be situated within the broader "Digital Media and Well-Being" discourse, which is without much doubt one of the most relevant media psychological issues of current times, especially as it addresses young people's experiences. This is particularly true since last year when Australia implemented their social media ban for minors (which is now considered across European countries, including, as I found out, Czechia) and perhaps even more so in light of mainstream tech companies now having been held liable for negligence concerning young people's mental health (with more rulings on similar issues and with similar arguments being likely in the near future). By focusing on several highly relevant subphenomena (e.g., native health advertising in Study 2, smartphone use in Study 4, or video gaming/streaming in Studies 6–8) and key outcomes (e.g., sleep health in Study 4, body appreciation in Study 5, or loneliness and depressive symptoms in Study 6), Dr. Lacko clearly hits the current nerve in terms of topicality.

Given the current public climate, it is very commendable that Dr. Lacko does not follow the arguably most convenient stream of precautionarily fatalistic scholarship here but instead emphasizes an agentic perspective on adolescents' well-being that accounts for substantial variation across ICT harms and benefits, emphasizing the frequently documented relevance of risk and protection factors explaining said effect variation. Although I felt as if Dr. Lacko portrayed this standpoint in his thesis as more novel and/or peripheral within academic discourse than I would consider it (given, most notably, the groundbreaking and very well-cited work, for instance, by ASCoR's Project AWeSome [<https://www.ccam-ascor.nl/project-awesome>] which conceptually relies quite heavily on nuanced work that has been present for more than a decade) and also noting that I did not have the feeling that all included manuscripts were conceptualized with this position in mind from the beginning but instead ended up with it after being tasked with interpreting inconclusive results, I can say with great confidence that his work breaks from the most common deficit-oriented path in the field in favor of a more nuanced and agentic approach that is typically recognized as not only as less overpathologizing but also as most promising for investigating digital media-driven well-being effects. Said more concretely: Several of Dr. Lacko's included publications (that is, most notably, Studies 4, 6, and 8) can very much be considered at the top-level in the field's arguably most productive perspective these days.

In terms of theoretical prowess, Dr. Lacko himself stated on p. 12 that his thesis "can be conceptually anchored" in Smahel et al.'s (2023) iMEW, a theoretical framework introduced in developmental psychology that complements the seminal Differential Susceptibility to Media Effects Model (Valkenburg & Peter, 2013) with further specifying conceptual insights from other prominent theories (i.e., Problem Behaviour Theory, Health Belief Model, and

Ecological Systems Theory). He further claims extending the iMEW “by integrating theoretical insights from the General Aggression Model (GAM) and Self-Determination Theory (SDT)” (p. 43), both constituting again extremely well-established psychological theories. While referring to these theories (which are relevant primarily in Studies 6–8), as well as several similarly crucial theoretical notions and approaches across the other included papers (just to name a few: digital divides and parental mediation in Study 1; processing of commercial media content model in Study 2; system theory of trust in Study 3; mood management theory in Study 4; body image/satisfaction/appreciation in Study 5) speak for Dr. Lacko’s proficient knowledge and sound application of relevant theory in the subfield, I nevertheless ended up somewhat unconvinced of this thesis’ theoretical coherence, rigor, and innovativeness.

This has two main reasons: First, I found it rather unfortunate that said theoretical anchor has not once been referred to as an overarching guiding framework in any of the included manuscripts. As much as I am aware that iMEW, primarily because of its integrative (arguably, somewhat eclectic) nature, is not necessarily suitable for being tested specifically (and borderline impossible to do so in full), and also acknowledging that Dr. Lacko indeed briefly situated all included studies within the framework, its absence from all publications comes with a price that is a lack of theoretical coherence. In brief: It makes it appear more like an afterthought than a guiding idea.

Second, I’m slightly concerned about both necessity of how and rigor behind further integrating SDT and GAM into iMEW is supposed to advance our theoretical understanding of the subject at hand in a sufficient degree. For one thing, it is very much unclear to me how the proposed domain-specific specification of “susceptibility variables”, “ICT activities”, and “well-being effects” provides substantial grounds for theoretical innovation beyond simply applying it to qualitatively different scenarios via domain-specific theorizing (thus, essentially disagreeing with Dr. Lacko’s statement on p. 15). Not to be misunderstood here: This is indeed meritorious in itself; however, I would consider the given theoretical innovativeness as limited, in particular since, for instance, SDT mechanisms were not directly tested for but merely argued with in Study 6 and GAM propositions were not broadly supported in Studies 7 and 8. What does not help here is that neither of these presumably pivotal theoretical approaches are elaborated upon in necessary detail (including, for instance, their underlying theoretical core assumptions, deep reflections concerning their boundary conditions, existing or plausible challenges and limitations, or an in-depth discussion of comparative approaches) beyond relatively brief but, for the most part, pretty concise summaries. Altogether, I think that Dr. Lacko could have been more thorough here instead of holding the proposed theoretical innovation to be self-evident.

On the study-level, however, I generally found all studies to be theoretically/conceptually sound and well-argued. When it came to theorizing their empirical findings though (especially in case of null findings), I felt as if Dr. Lacko and his respective colleagues at times (!) ended up slightly overambitious in their interpretations, for instance, when postulating that their non-significant effect for the native advertising condition in Study 2 speaks for “the need for increased regulation for advertising on social networking sites” (p. 86) due to the possible relevance of untested peer-generated advertising or when claiming their lacking main effects for institutional and interpersonal intermediaries suggest that, again untested, content characteristics “play a more significant role than expected” (p. 103). Despite these very occasional interpretative flaws, I nevertheless generally see proper reasoning in Dr. Lacko’s theoretical approach who notably does not show otherwise all-too-common signs of theory blindness when findings do not align with theoretical expectations but instead appears to be well-rounded and (positively) flexible in this regard.

With regard to Dr. Lacko's methodological approach, I can attest substantial methodological and analytical versatility within the post-positivist quantitative paradigm dominating contemporary psychology, including, among more traditional methods, advanced state-of-the-art methods like intensive longitudinal (Study 4) and multi-wave panel designs (Studies 6 and 8), as well as some of the best statistical techniques like multi-level regression models (Study 4), multi-group structural equation (Studies 5 and 7), or random-intercept cross-lagged panel modeling (Studies 6 and 8). What may be more telling though is the impressive rigor underlying it. Although some publications did contain, what in hindsight I would consider, unfortunate methodological decision (e.g., resulting in critically unequal experimental groups in Study 3 or unnecessarily limited experimental stimuli in Study 7) or minor flaws (e.g., concerning the descriptive reporting in Study 2 or the moderation-mediation mix-up in Study 3) that can happen to the best of us, all studies demonstrate Dr. Lacko's great methodological and analytical expertise, which already enabled (and will enable) him to conduct highly innovative research that is (and will be) better than what is regularly published in some of the best outlets of the broader field. From the current selection of included publications, I would like to highlight Study 4 and Study 6 here, which showcases Dr. Lacko's methodological and analytical skills in an exemplary fashion, resulting in a significant contribution to the technology-oriented sleep health and video game effects literature, respectively, that I would consider much better than most available research in both subfields.

What further needs to be emphasized here is that Dr. Lacko fairly rigidly follows open science principles (including preregistration and transparent appendix reporting), shows exemplary reporting standards, particularly when it comes to his analytical procedures (including which R packages and versions were used), showcases more-than-solid creativity for interesting experimental setups, and a firm awareness for method-inherent limitations (while standing his ground against more or less justifiable criticism from more senior scholars as recently exemplified in the "exchange" with Teng and Bushman). In these regards above all else, I can see an exceptionally well-equipped scholar capable of truly groundbreaking research that might contribute in a beneficial manner not solely to academia but similarly to society at large.

Overall, Dr. Lacko's habilitation thesis reveals a scholar who might not yet be at the end of his personal evolution—something that, frankly, I think should not be expected at his still relatively young age and career stage. However, it more importantly shows an already internationally recognized scholar (based on publications and citations) who exhibits significant intellectual maturity, particularly with respect to methods and statistics but with upwards potential for theory as well, and who is definitely capable of conducting and publishing high-quality original research independently (even though single-authored publications were not included in the present study package) and within inter(sub)disciplinary contexts due to his proficient knowledge of the entire field of psychology. All my critical notions following a focused search for shortcomings above and below aside, I genuinely enjoyed reading Dr. Lacko's habilitation thesis and am confident of his scholarly qualities.

Reviewer's questions for the habilitation thesis defence

A.) Overarching Questions

- (1) What is/are the reason/s for iMEW not being referred to in any of the included publications despite it being stated as the conceptual anchor of the habilitation thesis? What are crucial limitations of iMEW when it comes to utilizing it for single-study manuscripts?
- (2) How does this habilitation thesis (together with all included publications) extend and refine iMEW beyond (a) specifying additional paths and (b) operationalizing the abstract original placeholders with more concrete

variables/phenomena? In what ways does this improve iMEW's utility as a theory vs. organizing theoretical framework and what role should parsimony play in theory-building/-advancement here?

- (3) How can the additional integration of SDT and GAM into iMEW advance its utility even though SDT mechanisms have not been explicitly measured and GAM findings are limited and inconclusive (so much so that its original creators apparently felt the need to re-analyze the data)?
- (4) How could this habilitation thesis have possibly benefitted from the inclusion of qualitative research approaches? How, if at all, could qualitative methods be made fruitful for this research?
- (5) What is the concrete epistemic and practical value of non-significant findings (which there are quite a few in the included studies), particularly considering that no multi-study paper approach has been followed to further explore the reasons for them?
- (6) Why should a media-induced increase in aggression be considered not just relevant for young people's well-being but conceptually as a well-being effect in itself?

B.) Study-Specific Questions

- (1) Study 1: How valid are findings on young people's digital from 2017–2019 given both the rapid sociotechnological developments of digital environments and disruptive “real-world” events like, most notably, the COVID-19 pandemic?
- (2) Study 1: Given how rare it is that latent interactions are actually tested: How does the matched-paired, double mean-centering approach deal with common statistical and practical issues?
- (3) Study 1: If it would be possible to travel back to when the underlying data collection was set up, how likely would it be that you would recommend a different operationalization of online activities and, if likely, what would you recommend instead in order to avoid running into similar measurement issues?
- (4) Study 2: How valid is it to operationalize systematic and heuristic processing by the given experimental stimuli (no ad vs. banner ad vs. native ad) and what are critical shortcomings of such an approach?
- (5) Study 2: How can internal validity for gender comparisons conducted in this study be ensured given the fact that boys and girls were essentially confronted with varying topics?
- (6) Study 3: Provided, again, time travel would be possible, what alternative assignment procedure would you implement to avoid unequal experimental group sizes?
- (7) Study 4: What other incentive-schemes could have been implemented to avoid such amounts of missing values while still accounting for limited resource? How can such studies be conducted outside of structured institutional contexts (where participation can be guaranteed to some extent) with limited budget and without risking similar compliance issues?
- (8) Study 5: How legit is it to (transparently) report Sample 1 and Sample 2 in chronologically reversed order? What was the reason behind this decision?
- (9) Study 6: How does parasociality challenge the SDT-driven differentiation between social and non-social video gaming? If not, why given that parasocial engagement can also, albeit more temporarily, satisfy relatedness needs? How do other modes of non-solitary play of non-social games (e.g., tandem play) challenge your operationalization?
- (10) Study 7: Since I always felt this to be the most underdeveloped of all GAM propositions: How exactly are proximate GAM processes supposed to

impact distal GAM processes given that most of them (i.e., practically all biological and environmental modifiers [here, e.g., ADHD or cultural norms], also, by definition, personality) may be considered more or less immune against any external influence?

- (11) Study 7: Why should the non-aggressive commentary condition not be considered confounded by the apparently portrayed lack of enjoyment or even resistance from the streamer?
- (12) Study 7: How much, if at all, would a “full-control” condition without violent gameplay or even a 2 x 3 design with video game type (non-violent vs. violent game) improve the experimental logic of this study?
- (13) Study 8: Why should using the maximum violence score of the three self-selected video games be considered the better operationalization of exposure to violent video games (compared to, e.g., a sum score as in Study 1 or an [ideally weighted] average score)?

Conclusion

The habilitation thesis entitled “Adolescents and Information and Communication Technologies: Effects on Digital Engagement and Well-Being” by Mgr. David Lacko, Ph.D., **fulfils** requirements expected of a habilitation thesis in the field of Psychology.

Date: April 12, 2026

Signature:

