

## COMMENTARY TO HABILITATION THESIS<sup>1</sup>

**[1]**<sup>2</sup> Cino, D., Lacko, D., Mascheroni, G., Smahel, D. (2023). Predictors of children's and young people's digital engagement in informational, communication, and entertainment activities: findings from ten European countries. *Journal of Children and Media*, 17(1), 37–54. Doi: <https://doi.org/10.1080/17482798.2022.2123013>.

This cross-national survey study investigated predictors of adolescents' digital engagement in informational, communication, and entertainment activities across ten European countries. Using data from nearly 10,000 participants aged 11–17, the study examined how digital skills, psychosocial characteristics, and family environment shaped online activity. Employing multi-group structural equation modeling, the findings showed that perceived informational skills consistently predicted broader online use, while emotional problems and sensation seeking were also linked to engagement, particularly in informational activities. Parental mediation strategies played a significant role: enabling mediation encouraged broader participation, whereas restrictive mediation limited it. The results highlight how adolescents' dispositions and contexts shape their digital lives beyond simple screen-time measures. The author was responsible for data analyses. He wrote the first draft of the manuscript (primarily the Methods and Results sections) and contributed to the manuscript revisions. He was also responsible for preparing the open data and other online materials (<https://osf.io/mbkwq/>).

Experimental work (%)	Supervision (%)	Manuscript (%)	Research direction (%)
50	0	50	25

**[2]** Lacko, D., Machackova, H., & Slavík, D. (2024). Adolescents' Perceptions of the Credibility of Informational Content on Fitness and Dietary Supplements: The Impact of Banner and Native Advertising. *Journal of Adolescence*, 96(8), 1956–1968. Doi: <https://doi.org/10.1002/jad.12394>

This preregistered experimental survey examined how banner and native advertisements affect adolescents' perceptions of the credibility of online informational content on fitness and dietary supplements. A sample of 681 Czech adolescents was randomly assigned to ad-free, banner, or native ad conditions on a simulated website. Analyses revealed that both banner and native ads reduced perceived credibility compared to ad-free content, with no significant difference between the two ad types. Boys evaluated native ads as slightly more credible than girls, who reported lower purchase intentions. Overall, the study demonstrated that subtle advertising formats do not bypass adolescents' critical evaluation, as advertising presence reliably lowers perceived content credibility. The author led the article and was responsible for the study's conceptualization, methodological design, investigation, and data analyses. He drafted the entire manuscript and contributed to the manuscript revisions. He was also responsible for preparing the open data and other online materials (<https://osf.io/khqat/>), as well as for the pre-registration (<https://osf.io/4pvz6>).

Experimental work (%)	Supervision (%)	Manuscript (%)	Research direction (%)
90	10	75	75

**[3]** Slavík, D., Lacko, D., & Macek, J. (2025). The Effect of The Chain of Trust on Credibility of News On Facebook. *International Journal of Communication*, 19, 1058–1080. Url: <https://ijoc.org/index.php/ijoc/article/view/23331>

<sup>1</sup> The commentary must correspond to standard expectations in the field and must include a brief characteristic of the investigated matter, objectives of the work, employed methodologies, obtained results and, in case of co-authored works, a passage characterising the applicant's contribution in terms of both quality and content.

<sup>2</sup> Bibliographic record of a published scientific result, which is part of the habilitation thesis.

This quasi-experimental survey explored how trust in media outlets and interpersonal trust in Facebook intermediaries shape credibility judgments of news content. With 702 Czech university students as participants, the study manipulated whether a health-related article was posted directly by a trusted or distrusted news outlet or shared by a trusted or distrusted Facebook friend. Results indicated that institutional trust in the news outlet slightly increased perceived credibility, whereas interpersonal trust in the sharing friend had no effect. No amplification or substitution effects were found between the two trust sources. The findings suggest that, at least in everyday contexts, adolescents and young adults rely more on content characteristics than on interpersonal trust when evaluating news on social media. As the second author, I was responsible for the data analyses. I wrote the Results sections and contributed to the manuscript revisions.

Experimental work (%)	Supervision (%)	Manuscript (%)	Research direction (%)
40	15	30	10

[4] Tkaczyk, M., Lacko, D., Elavsky, S., Tancoš, M., & Smahel, D. (2023). Are smartphones detrimental to adolescent sleep? An electronic diary study of evening smartphone use and sleep. *Computers in Human Behavior*, 149, 107946. Doi: <https://doi.org/10.1016/j.chb.2023.107946>

This 14-day electronic diary study investigated how evening smartphone use influences adolescents' sleep. A sample of 201 Czech adolescents provided both objective smartphone usage logs and daily self-reported sleep outcomes. Generalized linear mixed models were applied to examine within- and between-person associations. Contrary to widespread assumptions, between-person analyses found no evidence that heavier overall smartphone users slept worse. Within-person analyses revealed that on nights when adolescents used smartphones more than usual, they fell asleep earlier and slept longer, with no adverse effects on sleep quality or efficiency. The study challenges the narrative of universally harmful effects of evening smartphone use, suggesting that context and motivation may shape its influence on sleep. The author was responsible for the validation, and data analyses. He wrote the first draft of the manuscript (primarily the Methods and Results sections, and Supplementary Materials) and significantly contributed to the manuscript revisions.

Experimental work (%)	Supervision (%)	Manuscript (%)	Research direction (%)
50	20	50	30

[5] Kvardová, N., Lacko, D., & Machackova, H. (2023). The validity of the Czech version of Body Appreciation Scale-2 for adolescents. *Journal of Eating Disorders*, 11(1), 176. Doi: <https://doi.org/10.1186/s40337-023-00897-7>

This psychometric study validated the Czech version of the Body Appreciation Scale-2 (BAS-2) for adolescents and examined its associations with key well-being indicators. Two large samples of Czech adolescents (n = 613 and n = 1,530) completed the adapted scale together with measures of body satisfaction, media-ideal internalization, self-esteem, and depression. Confirmatory factor analysis supported the unidimensional structure of BAS-2, and measurement invariance was confirmed across gender and age groups. Importantly for this habilitation thesis, the results revealed that body appreciation was negatively related to depressive symptoms, with these protective effects being significantly stronger among girls than boys. This gender difference is directly relevant to the broader focus of the thesis, as it highlights how digital engagement and body image processes contribute differently to psychological well-being across genders, underscoring the need to consider gender-specific pathways when evaluating adolescents' vulnerability and resilience in digital contexts. The author was responsible for the supervision, and data analyses. He wrote the Results sections and contributed to the manuscript revisions.

Experimental work (%)	Supervision (%)	Manuscript (%)	Research direction (%)
40	50	35	25

[6] Lacko, D., Kyslík, F., Smahel, D., & Machackova, H. (2025). Gaming Together, Feeling Better—or Feeling Worse? How Social Video Gaming Impacts Loneliness and Depressive Mood Differently for Boys and Girls. *Computers in Human Behavior*, 172, 108752. Doi: <https://doi.org/10.1016/j.chb.2025.108752>

This longitudinal study examined how social video gaming relates to adolescents' loneliness and depressive mood, distinguishing between within- and between-person effects. A representative sample of over 3,000 Czech adolescents reported their gaming habits, which were coded for social interaction potential using the SIPA tool, along with measures of loneliness and depressive mood across multiple waves. Random-intercept cross-lagged panel models showed that adolescents who generally played highly social games tended to be lonelier, suggesting unmet needs for relatedness. However, within-person increases in social gaming were linked to reduced loneliness, pointing to short-term benefits. More importantly, gender moderated these effects: boys experienced reductions in loneliness and depressive mood from social gaming, whereas girls often saw no benefit or even negative outcomes. The author led the article and was responsible for the study's conceptualization, methodological design, investigation, and data analyses. He drafted the entire manuscript and contributed to the manuscript revisions. I was also responsible for preparing the open data and other online materials (<https://osf.io/u28mv/>).

Experimental work (%)	Supervision (%)	Manuscript (%)	Research direction (%)
90	10	80	80

[7] Lacko, D., Machackova, H., & Dufková, E. (2023). Does Aggressive Commentary by Streamers during Violent Video Game Affect State Aggression in Adolescents? *New Media and Society*, 27(2), 655-680. Doi: <https://doi.org/10.1177/14614448231182620>

This preregistered experiment investigated whether aggressive commentary by streamers during violent video game play influences adolescents' state aggression. In a sample of 604 Czech adolescents, participants were randomly assigned to watch gameplay with aggressive commentary, non-aggressive commentary, or no commentary. State aggression was assessed via hostility and normative beliefs about aggression. Results showed no significant effects of aggressive commentary on state aggression, and personal traits such as trait aggression and empathy were much stronger predictors than situational exposure. Boys reported higher retaliation beliefs than girls, while long-term exposure to violence was linked to more aggressive norms. Overall, the study found negligible situational effects of aggressive commentary, emphasizing the primacy of individual dispositions. The author led the article and was responsible for the study's conceptualization, methodological design, investigation, and data analyses. He drafted the entire manuscript and contributed to the manuscript revisions. He was also responsible for preparing the open data and other online materials (<https://osf.io/d29xc/>), as well as for the pre-registration (<https://osf.io/anhsg>).

Experimental work (%)	Supervision (%)	Manuscript (%)	Research direction (%)
90	0	90	90

[8] Lacko, D., Machackova, H., & Smahel, D. (2024). Does Violence in Video Games Impact Aggression and Empathy? A Longitudinal Study of Czech Adolescents to Differentiate Within- and Between-Person Effects. *Computers in Human Behavior*, 159, 108341. Doi: <https://doi.org/10.1016/j.chb.2024.108341>

This four-wave longitudinal study explored whether violent video game play affects adolescents' aggression and empathy, using random-intercept cross-lagged panel models to separate within- from between-person effects. Data from over 3,000 Czech adolescents showed no evidence that violent gaming increased aggression or reduced empathy over time. Instead, between-person differences accounted for associations: adolescents who were generally more aggressive tended to play more violent games, reflecting selection rather than causal desensitization. Within-person effects were minimal and inconsistent, and empathy was largely unaffected, with a small positive association

suggesting that empathetic adolescents may also engage in violent but narratively rich games. The findings challenge claims of harmful long-term causal effects of violent video games. The author led the article and was responsible for the study's conceptualization, methodological design, investigation, and data analyses. He drafted the entire manuscript and contributed to the manuscript revisions. He was also responsible for preparing the open data and other online materials (<https://osf.io/q5wv6/>).

<b>Experimental work (%)</b>	<b>Supervision (%)</b>	<b>Manuscript (%)</b>	<b>Research direction (%)</b>
90	0	90	90