HOW SMARTPHONES, SOCIAL NETWORKS AND ARTIFICIAL INTELLIGENCE RECONFIGURE THE FAMILY, READING AND THE HUMAN MIND - LEGAL ASPECTS

Adrian Sorin MARIAN, Lecturer Ph.D.
Faculty of Law, "Bogdan Vodă" University Cluj-Napoca

ABSTRACT

Every time a new communication technology appears, we are scared first and understand only later — as happened with television in 1953, as it is happening now with the smartphone, social networks and artificial intelligence. This article tries to separate, patiently, what is proven from what is just plausible speculation, in the connection between these technologies and three collapses that we are experiencing simultaneously: of the family, of reading and of education. The idea I defend here is that the three are not parallel phenomena, but a single mechanism, which behaves like a "snowball" — just like inflation, which feeds on its own anticipation, neither the distance in a couple, nor the decline of a generation of teachers need a repeated external shock to deepen; they sustain themselves, through thousands of small, seemingly innocent decisions made every day. I review research in psychology, attention economics, and educational sciences, put them alongside Mircea Platon's thesis on systematic deschooling in Romania, and explicitly separate what is empirically supported from what is merely circulated as opinion — so that, in the end, the proposed recommendations are realistic, not just moral.

KEYWORDS: *smartphone, social networks, artificial intelligence, deschooling, technoference, attention economics, deep reading, "snowball" effect.*

J.E.L. Classifications: **D83, D91, I20, L86, O33, Z13**

1. ARGUMENT

In 1953, a Harvard University report, commissioned by the US Congress, warned of an alleged increase in juvenile delinquency caused by television. Romania would receive the same object of fear only three years later, in 1956, when public television began broadcasting. Today we know that that report exaggerated much of what it claimed. But the mechanism it captured — public fear arising in the face of a new communication technology — has been repeated identically with every technological wave since then: radio, television, the internet, and now the smartphone,

social networks and artificial intelligence. The difference, this time, is not one of nature, but of speed and depth.

Television passed through reporters, editors and editors-in-chief — human filters, slow but real. The screen in each of our pockets no longer passes through anyone. It is designed, optimized, and statistically tested for one purpose: to keep us engaged for as long as possible.

I wrote in a previous article about how smartphones, social media, and artificial intelligence seem to be simultaneously eroding three things we thought were solid: the relationship between parents and children, the relationship between husband and wife, and the once-natural habit of reading a book to the end. I won't go back here to the rhetorical questions I asked then—why do children suspect their parents, why do the most educated groups sometimes have the highest divorce rates, why have we come in last place in Europe in reading books?

Instead, I want to go a step further and show something that I think is missing from most writing on this subject: that these three collapses—of family, of reading, of education—are not three parallel phenomena, but one single phenomenon, feeding off of itself, just as inflation feeds off the expectation of inflation.

2. IT'S NOT THE PHONE THAT'S THE PROBLEM, BUT THE ECONOMY THAT DRIVES IT. "TIME IS MONEY" IN A DIGITAL VERSION. ATTENTION TIME!

The most important shift in perspective in recent years in the technology literature is the shift in focus from the object (the phone) to the economic system that governs it—what researchers call the "attention economy."

Human attention span has become a finite resource, sold to advertisers, and apps compete for every second of it. The underlying mechanism—variable reward, the same psychological structure that fuels gambling—has been described by researchers like Nir Eyal and critically analyzed by former industry engineers like Tristan Harris. The outcome of this competition is measurable: For more than two decades, researcher Gloria Mark of the University of California-Irvine has tracked, through direct measurements, how long a person can stay focused on a screen before switching. In 2004, the average was two and a half minutes. Today, it's 47 seconds. This isn't a subjective impression of "this generation"—it's an objectively measured trend that applies to adults, not just teenagers. Consider a mundane scene: a father sits at the table with his four-year-old, and his phone vibrates in his pocket. This is not an emergency from the hospital or a message from the wife —

most often it is a commercial notification, automatically generated by an algorithm that has statistically calculated what time of day that father is most likely to open the app.

The father did not consciously choose to be less present. He simply finds himself in an unequal competition with an industry that invests billions in such mechanisms. It is not a personal weakness, We are not talking about a simple deficit of will. We are competing with platforms that invest fabulously to achieve this result. That is, a rigged game from the start. This reformulation matters for the debate about family: we are not talking about an object that we can ban, but about an industrial system deliberately built to capture time and attention — including time and attention that we would otherwise have given to our partner, children, or a book.

The attention economy does not explain everything. But it introduces a common, recognizable mechanism that amplifies already existing processes. Family, school, and reading have their own economic, cultural, and demographic determinants. We argue only that there is a common mechanism—systematic competition for human attention—that amplifies each of these processes and makes them mutually reinforcing.

3. WHEN THE PHONE BECOME TOO PERMANENT MEMBER OF THE FAMILY

When a parent interrupts their interaction with their child to respond to a notification, researchers Brandon McDaniel and Jenny Radesky, publishing in the journal Child Development, called the phenomenon "technoference" — the interference of devices in the attachment relationship. The child does not experience this as a simple administrative distraction, but, repeatedly, as a form of intermittent emotional unavailability.

Their studies, including longitudinal ones later published in Pediatric Research, show something even more disturbing than a simple correlation: the relationship is bidirectional.

The more behavior problems a child has, the more the parent, stressed, takes refuge in the phone; and the more the parent takes refuge in the phone, the more the child's behavioral problems increase. It's not a single, linear cause, it's exactly what engineers call a positive feedback loop—a circle that tightens on its own without the need for an outside push to sustain it.

Here it is important, for an article that aims to be rigorous, not to oversimplify. Meta-analyses led by researchers such as Candice Odgers and Amy Orben—among the most cited papers in the field—show that the link between screen time and youth mental health problems is real, but of moderate magnitude, and strongly dependent on the type of content, age, and, most importantly,

the quality of the family relationship surrounding technology use. In other words: the correct focus is not "technology is destroying the family", but "the quality of the parent-child relationship filters the impact of technology". It's an essential nuance—and one that actually provides real leeway for parents, rather than a fatality.

As for the couple relationship, the hypothesis that professions with heavy digital exposure—eg, IT people, doctors—would have systematically higher divorce rates because of technology is a claim I've seen often in the opinion press, but which is not, at this point, publicly supported by a solid study of comparable rigor to the ones cited above. We therefore state it as a research hypothesis, not as established fact—and we recommend the same caution to any reader who revisits it.

Rather, the gender literature shows, the divorce rate is positively influenced by the material well-being and implicit financial independence of individuals.

What is instead more clearly documented is the effect of accumulation: each notification we respond to at the table, each scrolling of a stream of content while our partner is speaking, represents a small reallocation of attention, invisible at the time but visible over time as a diffuse sensation of distance. It doesn't necessarily have to be a spectacular cause to erode a relationship—the sum of many such small moments, each taken separately, completely harmless, is enough.

4. THE FAMILY "SNOWBALL": WHY DISTANCE IS SELF-PERFORMING

I want to emphasize here a mechanism that most articles on this subject miss, because they stop at the observation of the effect ("technology is distancing us") without explaining why, once started, the process becomes increasingly difficult to stop.

The clearest comparison comes from economics: inflation is not only an increase in prices, but also — perhaps especially — a self-fulfilling prophecy. When people expect prices to rise next month, they demand higher wages now, merchants raise their prices now, to protect themselves, and the expected inflation becomes real inflation. The mechanism does not need an external shock to permanently fuel it; it feeds on its own anticipation.

Something structurally similar happens in the family. A couple in which one partner increasingly takes refuge in the phone does not get there all at once. The first step is small: an evening where, instead of conversation, each person scrolls through their own content stream. The partner who feels distance has, in theory, two options: to insist on attention, risking conflict, or to retreat into their own screen as a self-protective reaction. The second option is almost always easier in the

short term—and that is precisely why it is chosen more often. But each such choice deepens the habit, normalizes the distance, and makes the next evening of silence seem less serious than the first. The couple does not "decide" at a certain moment to distance themselves; the distance accumulates from thousands of small decisions, each rational in itself, just as no single merchant decides inflation alone, but all together produce it.

And the loop does not stop with the current generation. Children who grow up in a home where technoference is the norm don't just learn that their parents are sometimes distracted—they learn, by example, what a relationship between a couple and a family means.

They will most likely reproduce this exact pattern when they form a family of their own. Not because there is a genetic transmission of distraction, but because the only relational model they have seen up close, day after day, for years, is this one.

The parent's struggle with notification is not a momentary moral failure, but a cognitive asymmetry: on one side of the table is a human brain with a level of will tired after a day's work, and on the other side are supercomputers and hundreds of data engineers optimizing the delivery of dopamine millisecond by millisecond.

And the "Snowball" doesn't melt from one generation to the next—it rolls on, gathering a little more mass with each round. A huge, devastating avalanche that was created by the initial rolling of a lump. Such a conclusion naturally invites a counterargument: if technology can drive people apart, it can also bring them closer. For millions of families separated by migration, video calls and instant messaging have made it possible to maintain connections that, a generation ago, would have inevitably deteriorated. Social networks can facilitate communities of support, and artificial intelligence can personalize learning or provide rapid access to information. These benefits are real and should not be minimized. That is why the question is not whether technology is "good" or "bad", but under what conditions its advantages begin to be outweighed by economic incentives aimed at capturing attention. The argument in this article is not one against technology, but against a model of use that turns human attention into a commodity. From this perspective, the same tool can strengthen or erode relationships, depending on the rules that shape its use.

5. HOW DECLINE IS TRANSMITTED FROM ONE GENERATION TO ANOTHER

Up to this point, we have traced the effects of the attention economy on the family. But the same limited resource — human attention — also underlies the learning process. A family relationship requires shared time and attention; reading and school require sustained attention. If the same digital economy systematically fragments this resource, it is not surprising that the effects appear simultaneously in different spaces. We do not claim that the smartphone or social networks alone explain the decline of Romanian education, which has well-known institutional, demographic and cultural causes. We do, however, claim that they introduce an additional mechanism, common to all these areas: the transformation of attention from a condition of learning into an economically exploited resource. From this point, the logic of the "snowball" almost inevitably reappears in school.

The same logic—self-maintenance, not a repeated external impulse—explains why the educational decline in Romania does not seem to stop on its own, but, on the contrary, deepens from one school cycle to the next.

However, it would be an oversimplification to attribute the educational decline exclusively to digitalization. School results are influenced by numerous factors: the quality of the curriculum, teacher training, family social status, migration, underfinancing of education or demographic changes. The specialized literature does not claim that the smartphone alone explains these developments. What a growing body of research suggests, however, is that the attention economy acts as an amplifying factor: it reduces the time available for deep reading and concentration, making it more difficult to compensate for the other vulnerabilities of the system. In other words, technology does not replace the classic explanations of educational decline, but overlaps with them and may accentuate their effects.

Historian and essayist Mircea Platon documented, in the volumes "The Deschooling of Romania" (2020) and "The Educational Comintern and Digital Deschooling" (2024), the thesis that the successive reforms in Romanian education, begun in the 1990s, followed, with striking consistency, exactly the same steps previously taken in other countries — the United States in the 1950s-1960s, France in the 1970s — from the deprofessionalization of teaching staff to the replacement of classical rigor with a new psycho-pedagogical scholasticism. It does not matter, for the present argument, whether we accept Plato's interpretation of the origin and intention of these reforms in its entirety; what matters is his empirical observation — identical steps, in

different countries, at different times — because it describes exactly the pattern of a process that, once started, no longer needs a central plan to maintain it, but advances through its own institutional inertia.

It is important to distinguish two planes of explanation. Institutional reforms may lower educational standards from within the system, while the attention economy reduces, from without, the capacity of students and teachers to sustain deep reading and concentration. The two mechanisms are not mutually exclusive, but mutually reinforcing. It is precisely this overlap that explains why the decline is so difficult to reverse, so profound, and so severe.

And here comes the feedback loop, as clear as in the case of the family. A teacher trained in a system that demanded less of him—less comprehensive reading, less grammatical rigor, less working memory exercised through sustained practice—cannot, however well-intentioned he may be, transmit to the next generation something that he himself has not practiced sufficiently.

It is not personal fault, it is simply an impossibility: you cannot teach, at a consistent level, a skill that the system has not given you the opportunity to build solidly. That teacher's students will become, twenty years later, the teachers of the next generation — and the bar, which has been lowered a little at each turn, will, after three or four cycles, reach considerably lower than the starting point.

Just like inflation: there is no need for a deliberate decision to "lower the level" at each step — it is enough for each generation to faithfully transmit exactly what it received, for the cumulative decline, in the long term, to be massive.

Official data on Romania confirms a real decline, published by the OECD, in the PISA 2022 tests, Romania obtained 428 points in each of the three tests — mathematics, reading and science — which places the country in 45th place out of 80 countries in mathematics and reading and in 48th place in science. The OECD average is approximately 50 points above the Romanian result. The correlation between this educational gap and students' massive digital exposure during their free time is a hypothesis supported by a growing body of research, although the exact causal relationship remains a subject of active research, not a foregone conclusion.

Neuroscientist Maryanne Wolf, author of Reader, Come Home, shows that reading.

6. WHEN YOU START THINKING FOR US. AFFECTING JUSTICE

AI should not be treated as a separate phenomenon from the rest of the digital ecosystem, but as a multiplier of already existing trends.

On the one hand, automatic content personalization deepens exactly the attention-grabbing mechanisms described above.

On the other hand, a new and specific phenomenon appears: "cognitive offloading" — the tendency to delegate to an external tool cognitive processes (memorization, drafting, even reasoning) that the mind would otherwise have exercised alone.

A student who asks a language model to summarize a novel for him, instead of reading it, not only misses the opportunity to practice the circuit of deep reading I talked about above—he enters, one step earlier than previous generations, exactly the same snowball of unschooling.

But AI can also improve learning. At the moment it appears almost exclusively as a negative amplifier. But it should be said: used for explanation, feedback, personalization, AI can increase performance. The problem is the substitution of thought. The useful question of whether we use AI is how we use it: as a tool that complements thought, or as a substitute for it. The difference between the two is decided, to a large extent, at the level of habits formed from early education—and the next ten years will matter enormously.

Affecting the act of justice. It seems minor, insignificant, but the decrease in attention at 47 seconds affects the very act of justice or the quality of legislation.

A judge, lawyer or legislator suffering from technoference and fragmented processing will tend to draft/analyze judgments and normative acts based on superficial syntheses, templates (or even generated by AI without verification), losing the ability to systematically and teleologically interpret the law.

7. AN OLD PATTERN: WHY EVERY GENERATION THINKS ITS TECHNOLOGY IS THE FIRST DISASTER

The 1953 Harvard Report is not the only such episode. At the same time, in the United States, the psychiatrist Fredric Wertham published "Seduction of the Innocent", a study which claimed, with an impressive scientific apparatus for its time, that comics cause juvenile

delinquency - a thesis that led, in 1954, to the establishment of a code of self-censorship for the entire American comic industry.

Forty years later, in the 1990s, the same argumentative structure was recycled almost identically against video games, accused of engendering violence, isolation and school failure. Today we know, from more rigorous subsequent research, that the connection between comics and delinquency was largely a moral construct, not a solid empirical finding; and the link between video games and real-life violence has, in turn, turned out to be much weaker than originally claimed.

Why is this historical detour worth it? Because it helps us distinguish two things that moral panics always conflate: the fact that a new technology changes behavior (true, every time) and the fact that that change is necessarily a moral catastrophe (false, most of the time, at least in the exaggerated form in which it is announced).

What I propose in this article is not a repeat of the fear of 1953 or 1954, but its exact opposite: an analysis that takes the hard evidence seriously—technoference, measurably declining attention, PISA scores—and clearly separates it from unsupported speculation, however intuitive the latter may seem.

The couple: a broken conversation, not a single break.

Researchers Andrew Przybylski and Netta Weinstein published in the Journal of Social and Personal Relationships a simple and hard-to-dispute experiment: pairs of strangers were made to talk for ten minutes, some with a phone visible on the table, some without.

Those who had the phone in their field of view—even though no one was touching it—reported lower conversation quality and less perceived closeness to the interlocutor compared to pairs without a phone on the table.

The mere presence of the device, as a latent possibility of interruption, is enough to change the way we listen to each other. In a couple who have lived under the same roof for years, this effect doesn't happen just once over dinner—it happens thousands of times over dinner, in bed, in the car, and the sum of it, not dramatic in isolation, is exactly what many partners describe, upon separation, as "we drifted apart without knowing exactly when."

Who is more vulnerable?

The effects of these transformations are not equally distributed in society. Groups with less access to quality education are repeatedly the weakest in distinguishing verified information from

manipulation, which also makes them the easiest targets for polarizing content and misinformation. The decline of reading is not, then, just an abstract cultural loss—it is also a loss of a concrete cognitive defense against.

8. WHY THE SOLUTION DOESN'T START IN PARLIAMENT, BUT IN THE LIVING ROOM

I showed earlier that it is not technology alone that decides the future of the family, but the rules that a society imposes. We need to be clear about what we mean by "rules", because the term can seem abstract. We're not primarily referring to laws voted in Parliament — although those matter too, and the European Regulation on Artificial Intelligence (AI ACT) and the Digital Services Act are real steps in the right direction. We are referring to something closer to each reader: to the small rules, negotiated in each home and in each classroom — whether or not there is a place for phones at the dinner table, whether or not there is a habit of reading aloud to the little ones, whether or not there is a time of the day reserved, explicitly, for conversation without screens. These private rules, taken one by one, seem negligible in the face of a multi-billion dollar global industry. But exactly the same thousands of small decisions that build, aggregated, the self-reproducing process of distance, can build, aggregated in the opposite direction, a lump of closeness. The difference between the two directions lies not in a law or a study, but in what we choose, repeatedly, on a typical Tuesday night.

9. WE CANNOT STOP A SNOWBALL WITH A SINGLE GESTURE

If we accept that the underlying mechanism is one of self-maintenance, not of simple cause and effect, then the solutions must also be thought of differently. A government fighting inflation isn't content to freeze prices for a week — it knows it needs to change expectations, not just the symptom of the moment. Likewise, a family or a school trying to stop this snowball won't succeed with a single symbolic gesture — an evening without phones, a month-long campaign. It will require a sustained change in habits, repeated often enough that the new habit becomes, in turn, self-sustaining, in a good way: the more a family reads together, the more the children demand more reading themselves; the more a school succeeds in training a few excellent teachers, the more they in turn train other excellent teachers.

The snowball can also roll in the right direction—but it needs the same kind of structural persistence as the one rolling down.

From moral panic to evidence-based policy.

The correct conclusion of this analysis is not an indictment of technology, but a shift of responsibility from the individual to the system. Several directions already have documented results in other countries — but even here the evidence is not uniform, this nuance must be recognized, not hidden:

• Banning phones in schools is, perhaps surprisingly, the measure with the most uneven results in the literature. Economists Louis-Philippe Beland and Richard Murphy, analyzing bans applied in Great Britain, found an increase in school results especially among low-performing students.

In contrast, a rigorous replication in Sweden by Kessel, Hardardottir and Tyrefors found no measurable effect of the ban on school performance. The honest conclusion is not "the ban works" or "the ban doesn't work," but a less comfortable one: a simple ban without other structural changes around it seems insufficient on its own—exactly what we'd expect if we accept that we're talking about a snowball built up over years, not a switch we can flip;

• Minimum verifiable ages for creating accounts on social networks, coupled with algorithmic transparency obligations for platforms — the direction taken by the European Regulation on Artificial Intelligence (AI Act) and the Digital Services Act (DSA);

• National programs to reactivate reading, built on data, not blanket moral appeals, and thought long-term — because, as we have shown, a single school cycle cannot reverse a decline accumulated over three generations;

• Compulsory digital education in schools, focused on the critical use, not just the technical use, of digital tools and AI; Perhaps exaggerating, someone said that the digitization of education in Romania was reduced to some illegal profits brought by the purchase of useless tablets, programs and systems for adults, and digital tools for students to "copy", to cheat exams.

• The priority formation of a core of teachers with solid training in deep reading — not as a symbolic gesture, but as a deliberate investment in the point in the chain where the cumulative mechanism (the lumps) can be effectively turned around.

The point that should remain, beyond any pointed recommendation, is simple and hard to ignore: It is not technology alone that decides the future of family and education, but the rules that a society chooses—or refuses—to impose on how it is designed and used.

Moral panic solved nothing in 1953, in front of the telly.

10. FERENDA BILL PROPOSALS

1. Proposal on the introduction of the Mobile Phone-Free School Environment (National Level)

Title / Amendment: Amendment and completion of the Pre-university Education Law no. 198/2023.

Proposed normative content: "Art. 106 – (1) The use of mobile phones and individual electronic communication devices by students is prohibited throughout the school program (class hours and breaks) in primary and secondary education. (2) In high school education, the use of electronic devices may be authorized exclusively during class hours, strictly for teaching purposes, under the direct guidance of the teacher. (3) Educational units are obliged to ensure secure spaces for storing devices during the school program, as well as alternatives for active recreation during breaks."

Motivation: Although the international literature presents nuances, unitary implementation, coupled with physical storage infrastructure and alternative activities during breaks, eliminates attention fragmentation and reduces the phenomenon of cyberbullying in the school environment.

2. Proposal on the Legal Liability of Social Platforms for Addiction Mechanisms Intended for Minors

Title / Amendment: Completing the Legislative Framework on Digital Services and the Protection of Minors (Alignment with the DSA/AI Act).

Proposed regulatory content: "Art. X – (1) Providers of social media platforms and digital content are prohibited from using addictive interface architectures (such as infinite scroll, autoplay, unannounced variable rewards and nightly push notifications) in accounts accessible to minors under 18 years of age. (2) The creation of accounts on social media platforms by minors aged between 13 and 16 years is subject to the express and verifiable consent of their parents or legal representatives, through a secure national/European age verification system. (3) Failure to comply with these provisions constitutes a serious offence and is punishable by a fine of up to 4% of the provider's global turnover."

Motivation: Moving from the exclusive responsibility of the parent to the strict legal responsibility of the digital service provider, sanctioning addictive design (Dark Patterns) directed against the developing brain of the minor.

3. Proposal on the Obligation of Transparency and Ethical Integration of AI in the Educational Evaluation and Writing Process

Title / Amendment: Regulation of the use of Generative Artificial Intelligence systems in the pre-university and university environment (Supplementation of Law no. 198/2023 and Law no. 199/2023).

Proposed normative content: "Art. Y – (1) The use of generative artificial intelligence systems by pupils and students in the development of assessment papers, exams or bachelor's/dissertation papers without explicit mention of the tool and the instructions used (prompts) constitutes academic fraud. (2) The Ministry of Education will establish the National Guide on the Use of AI as an Auxiliary Tool, prohibiting the total substitution of writing, reading and text analysis processes. (3) Educational institutions are obliged to introduce mandatory annual modules of "Attentional Hygiene, Deep Reading and Critical Thinking" for pupils and teachers."

Motivation: Combating the phenomenon of cognitive offloading (total cognitive delegation) and protecting the deep reading brain circuits (deep reading circuitry), by establishing clear boundaries between auxiliary technological support and the substitution of human critical thinking.

REFRENCES

Mircea Platon, Deschooling Romania. The Goals, Moles, and Architects of Romanian Education Reform, Ideea Europeană Publishing House, Bucharest, 2020.

Mircea Platon, The Educational Comintern and Digital Deschooling, Ideea Europeană Publishing House, Bucharest, 2024.

Jonathan Haidt, The Anxious Generation: How the Great Rewiring of Childhood Is Causing an Epidemic of Mental Illness, Penguin Press, New York, 2024.

Gloria Mark, Attention Span: A Groundbreaking Way to Restore Balance, Happiness and Productivity, Hanover Square Press, New York, 2023.

MARIAN, Adrian Sorin, Financial and Fiscal Law, Galaxia Gutenberg Publishing House, Cluj-Napoca, 2021

Maryanne Wolf, Reader, Come Home: The Reading Brain in a Digital World, Harper, New York, 2018.

Brandon T. McDaniel, Jenny S. Radesky, "Technoference: Parent Distraction With Technology and Associations With Child Behavior Problems", Child Development, vol. 89, no. 1, 2018, pp. 100–109.

Brandon T. McDaniel, Jenny S. Radesky, "Technoference: Longitudinal Associations between Parent Technology Use, Parenting Stress, and Child Behavior Problems," Pediatric Research, vol. 84, 2018, pp. 210–218.

Andrew K. Przybylski, Netta Weinstein, "Can You Connect with Me Now? How the Presence of Mobile Communication Technology Influences Face-to-Face Conversation Quality", Journal of Social and Personal Relationships, vol. 30, no. 3, 2013, pp. 237–246.

Fredric Wertham, Seduction of the Innocent, Rinehart & Company, New York, 1954.

Louis-Philippe Beland, Richard Murphy, "Ill Communication: Technology, Distraction & Student Performance", Labor Economics, vol. 41, 2016, pp. 61–76.

Vardan Kessel, Helena Hardardottir, Björn Tyrefors, "The Impact of Banning Mobile Phones in Swedish Secondary Schools", Economics of Education Review, 2020.

Candice Odgers, published summaries of research on technology and adolescent development.

Amy Orben, meta-analyses on the association between social media use and adolescent psychological well-being, University of Cambridge / University of Oxford.

OECD, PISA 2022 Results — Country Note: Romania, Organisation for Economic Co-operation and Development, December 2023.

Ministry of Education and Research, Press release on PISA 2022 results, edu.ro, December 5, 2023.