



EDITORIAL

Has the time come to ban smartphones in Brazilian schools?

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It has been widely published in the national press that the Brazilian federal government is planning to regulate the use of mobile phones in public and private schools nationwide.¹ The measure was announced by the Brazilian Minister of Education in October and was quickly processed in parliament, being approved by the senate (PL 4.932/2024) on December 18, 2024. It is now undergoing presidential review and is scheduled to come into force in the next academic year.² In fact, this same debate has recently occurred in several countries, resulting in measures to limit the use of mobile phones in the school environment.¹

France, Greece, Italy, China, and even some Brazilian states and cities, such as Rio de Janeiro and Porto Alegre, have already implemented measures to control the use of mobile phones in their schools. Now, following an unequivocal global trend and the decentralized initiatives of municipal and state authorities, the Brazilian federal government plans to implement a similar regulation on a national level, creating equal rules for all public and private schools, for “all stages of the basic education,” according to article 2 of PL 4932/2024,² expanding the scope of the target audience, given that when it was still being processed in the chamber of deputies, the bill was only targeted for application in the initial years of basic education.³

Naturally, a debate of such magnitude deserves the broadest democratic discussion, since it affects all of society, interfering with individual rights, parenting preferences, the limits of state intervention into school routines, etc. Nevertheless, opinion polls have consistently shown that most segments of the population, including congress, support such measures, despite the current political polarization. Both left- and right-wing congressmen have already expressed support for the bill, so it is moving toward presidential approval and implementation for the 2025 academic year.¹

For instance, a recent survey by AtlasIntel found that 58.6% of Brazilians support the banning of mobile phones

in schools and 37.7% are against it.¹ Thus, the political trend to approve the banning of mobile phones in schools is supported by public opinion. Given the situation, we will briefly review the scientific literature on the topic, focusing on the findings of two recent reviews in order to contribute to the debate. We wish to state clearly that we are neither in favor of nor opposed to the proposal. Our intention is to shed light on what has already been determined scientifically on the topic while recognizing that this debate transcends a merely scientific discussion. Evidence should be a guide for better decisions without naively assuming that a national political decision can be based solely on scientific findings. For the measure to succeed, it is paramount to consider the complex factors involved.

Very recent evidence on the subject includes a systematic review that selected five quantitative studies on academic performance and social well-being after mobile phones were banned in schools.⁴ Their meta-analysis resulted in a significant but modest effect size, which was more pronounced for the social well-being domain ($d=0.162$),⁴ although conflicting results have been reported elsewhere.⁵ Another recently published systematic review found no randomized controlled trials on the subject; the current evidence is based on a few small heterogeneous studies, whose findings are difficult to reconcile.⁶ Hence, as stated in a report published last September in *Scientific American*, “whether such rules achieve their intended ultimate goals is still being debated by scientists, as are potential unintended consequences.”⁷ In fact, the subject is of such interest that even UNESCO has addressed it, supporting the legitimacy of the ban in 2023.⁷

Preliminary results from Rio de Janeiro showed that banning mobile phones had positive effects on student learning.¹ According to Municipal Department of Education data, the measure increased the chance of an adequate learning level by 32% among 8th graders and by 53% among 9th graders.¹ According to the report, the higher the grade, the better the results, since older

students use mobile phones the most. Additionally, less cyberbullying was perceived during class breaks.

Thus, at this point we could take a step back and assume that the scientific data are insufficient to determine whether mobile phones should be banned or not. We must also understand that, beside scientific data, this debate involves a number of social issues, which should be considered by politicians before establishing federal regulations. Finally, considering the heterogeneity of the nation's schools, regulation appears necessary to ensure a variety of stimuli for children and adolescents. It also seems appropriate, given the proliferation of local regulations and the social interest expressed in polls on the subject. We conclude that there is a need for better evidence to assertively address mobile phone use in the school environment, not only during the initial years of primary school, as outlined in initial versions of the proposed legislation (which has already been approved by the education commission),³ but in all of primary school, as finally addressed by the senate,² given that it can affect academic performance, social well-being, cyberbullying, and other factors, such as the increasing use of smartwatches after smartphones are banned. The ban's short-, medium-, and long-term impact must also be assessed in places where it has already been implemented.

Disclosure

The authors report no conflicts of interest.

Author contributions

PMB: Conceptualization, Writing – original draft, Writing – review & editing.

AMAS: Writing – review & editing.

MCLM: Writing – review & editing.

TPF: Writing – review & editing.

APA: Writing – review & editing.

DMM: Writing – review & editing.

MARS: Writing – review & editing.

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