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COMMENTARY



Mainland China's 2021 restrictions on under-18s' video game time were imposed when older 2019 restrictions already applied: Omitting the historical regulatory context is misleading

Commentary on: Compliance and alternative behaviors of heavy gamers in adolescents to Chinese online gaming restriction policy (Zhou et al., 2024)

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ABSTRACT

Investigating the impacts of addiction policymaking following implementation is important. Effective policies should be considered for emulation elsewhere, whilst ineffective policies should be repealed. Zhou et al. (2024) reported how Mainland Chinese under-18s responded to the 2021 restrictions on their online videogame playtime, which were intended to curb online gaming addiction. However, Zhou et al. failed to mention that Mainland China had previously tried to achieve the same regulatory aim by imposing rules in 2019 that were more lenient than the 2021 rules but nonetheless restricted under-18s' gameplay time. These 2019 restrictions were neither acknowledged as crucial background in the introduction section nor accounted for by Zhou et al. when interpreting their results, thus giving readers the incorrect impression that the 2021 rules were the first ones introduced and that under-18s' gameplay time was not restricted at all prior to 2021. Importantly, Zhou et al.'s *entire* sample of young people therefore consisted not merely of 'heavy gamers' as they euphemistically described them as, but 'counterplayers' who actively contravened the 2019 rules. The misleading omission of this context is a major limitation and misrepresentation. The results should be interpreted accordingly and not overgeneralised.

KEYWORDS

video games, videogaming regulation, gameplay time, online gaming addiction, child protection, Mainland China, policy

Zhou, Liao, Gorowska, Chen, and Li (2024) investigated whether Mainland Chinese young people complied with the government restrictions on how long they are permitted to play online video games imposed in September 2021 and, if so, what alternative behaviours they engaged in instead. Needless to say, it is important to study the implementation and consequences of policymaking to ensure that regulations are evidence-based. This could help the relevant country to better reevaluate its regulatory position (if appropriate) and assist other countries in better deciding whether to adopt or emulate (in)effective regulations that have been tested elsewhere.

However, there is a key limitation to Zhou et al.'s (2024) study that has not been disclosed. As the authors are undoubtedly aware, the 2021 restrictions on Mainland Chinese under-18s' video game play time (that the study focused on) were not the first set of rules

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to be imposed. In fact, the 2021 rules represented a tightening of the 2019 restrictions that were initially imposed two years prior (Xiao, 2022). The Notice that announced the 2021 restrictions stated in its title that it was intended to 'further strictly regulate [进一步严格管理]' (国家新闻出版署 [National Press and Publication Administration (PRC)], 2021). Zhou et al. (2024) presented their results as if the 2021 restrictions were the first imposition of any such restrictions, which is misleading. Reading Zhou et al. (2024) with that local knowledge reveals certain surprising insights but also some methodological issues.

For background, the 2019 restrictions prohibited under-18s from playing video games for more than 1.5 hours per (normal) day or more than 3 hours on public holidays (国家新闻出版署 [National Press and Publication Administration (PRC)], 2019). Previous reporting, including from myself (Xiao, 2020), has incorrectly stated that the longer 3 hour limit also applied to weekends. That was a misstatement: weekends are not public holidays under Chinese law (国务院 [State Council] (PRC), 2013). The 2019 restrictions came into force on 1 November 2019. This meant that, from then on, the most amount of online video games a child who was compliant with the regulations could play was 10.5 hours per week or an average of 1.5 hours per day (which is the maximum daily limit). The 2021 restrictions were significantly more restrictive (Colder Carras, Stavropoulos, Motti-Stefanidi, Labrique, & Griffiths, 2021) and prohibited under-18s from playing online games at all, except between 20:00–21:00 on Fridays, Saturdays, Sundays, and public holidays (*i.e.*, 3 hours total in an average week) (Xiao, 2021).

Zhou et al. (2024) described their sample as consisting of 430 individuals selected from a wider sample of 2,846 potential participants. All 430 participants reported that they played online video games for 120 min or more per day prior to the 2021 restrictions being introduced. It is unclear how many of those 2,846 students actually completed the survey and provided data but did not satisfy the inclusion criteria because they played less than two hours daily. (One 18-year-old was also included in the sample but should have been excluded because the restrictions would no longer have applied to them.)

Accordingly, the major limitation with Zhou et al. (2024) was that the sample consisted entirely of young people who were contravening the 2019 restrictions already before the 2021 restrictions came into force. All 430 participants were playing at least 2 hours a day, which is over the 1.5-hour limit that certainly would have applied against their underage video game user accounts from 1 November 2019 onwards. This meant that all these young people were somehow circumventing and violating the 2019 restrictions, *e.g.*, using their parent's adult account or by renting someone else's account as Zhou et al. (2024) reported. This also meant that at least 15.1% of all potential participants (430 of 2,846) were violating the 2019 rules before the 2021 restrictions were imposed; the true rate of non-compliance was presumably even higher because young people who played 1.6 hours, for example, would also have been in

breach of the regulations but were not counted. It would aid the public's understanding if Zhou et al. (2024) could calculate and provide this percentage in their response.

Zhou et al. (2024) presented their participants merely as 'heavy gamers,' but, in fact, they were so-called 'counter-players' who previously demonstrably resisted and contravened regulations (see Denoo, Dupont, Grosemans, Zaman, & De Cock, 2023). This was therefore a rather idiosyncratic and, indeed, rebellious sample of young people. Presenting them as just young people who played video games more heavily than others is inaccurate and misleading. The results must therefore be interpreted in that light noting this major limitation. The findings remain insightful but should not be overgeneralised to the population.

It is also unfortunate that no data were collected on the amount of time spent by participants on online games *after* the 2021 restrictions were imposed (*i.e.*, post-policy gaming time): this would have better characterised the sample and individual participants. Zhou et al. (2024) simply assumed that a participant complied with the restrictions if they did not report either using their family member's identity or rent someone else's account to play the game. However, it is not unforeseeable for a ten-year-old child (the youngest age included in the sample) to not consider playing an online game on their parent's phone, which, by implication, means using their parent's identity, as using their family member's identity because they might not even know that is exactly what happened: they were merely handed a phone to play video games.

Further, there are other ways of knowingly or unknowingly circumventing the restrictions (*e.g.*, play an online game on its foreign, non-Chinese server where the restrictions do not apply). It is unclear what 'playing other unlimited games' that Zhou et al. (2024) deemed as compliant with the restrictions meant: this could be playing offline video games approved in Mainland China; online video games approved in Mainland China but whose operator did not implement the restrictions as required; or any games not approved in Mainland China. Zhou et al. (2024)'s method of determining 'compliance' is unsatisfactory. Self-reported data on post-policy gaming time (despite their obvious limitations) might have easily revealed that more participants were in fact non-compliant.

Indeed, Zhou et al.'s finding (2024) that 84.7% of their participants complied with the 2021 restrictions is significantly more incredible when considered in the context that all of those participants were previously breaking the 2019 rules that were far less restrictive. The rate of compliance with the 2021 restrictions amongst all Mainland Chinese young people must therefore be very high and probably nearly perfect (as we would expect children who did not break the 2019 rules to be even less likely to break the 2021 restrictions). Zhou et al. (2024) should calculate and provide this rate amongst all 2,846 potential participants in their response if possible.

It is unclear what changes in industry practice or enforcement could have caused or convinced 84.7% of young people who used to circumvent the 2019 rules that were, in context, not particularly restrictive to follow the far more restrictive 2021 rules. Tencent (2021, p. 3), the largest



video game company in China and, indeed, in the world, did report that the total gameplay time from underage accounts significantly declined after the 2021 restrictions were imposed as compared to when the 2019 rules were introduced (Xiao, 2022). However, big data analysis of over seven billion hours of playtime from Mainland China found no evidence of a reduction in heavy play amongst players (both adults and children included) after either the 2019 or 2021 restrictions were imposed (Zendle et al., 2023).

This important caveat about the sample and how the 2021 restrictions were a second set of rules that were imposed also meant that one survey question Zhou et al. (2024) included may have been overly simplistic. The participants were asked whether they felt ‘restricted in playing online games’ after 30 August 2021. The participant could only respond with a binary ‘yes’ or ‘no.’ However, much nuance has been lost with this overly simple question that did not take into account the potential effects of the 2019 restrictions. Some players may already have felt restricted by the 2019 rules and so would have felt restricted after 30 August 2021 irrespective of the introduction of the 2021 restrictions, whilst others might have felt unaffected by the 2019 rules but keenly felt the 2021 restrictions’ effects.

The interplays between the two different set of rules are highly interesting, and Zhou et al. (2024) missed a great opportunity to examine those issues. Future studies should, of course, take both of them into account (as we did in Zendle et al. (2023)) or at least acknowledge that by 2021 it was no longer possible to study Mainland Chinese young people as if they were tabulae rasae due to the previous 2019 interventions.

Beyond Zhou et al. (2024), this case highlights the crucial importance of not only involving local expertise as part of the authorship team, but journals must also play a part in diversity, equity, and inclusion (DEI) promotion by including reviewers with local expertise when assessing papers from specific regions. The misrepresentation or failure to disclose a key limitation issue raised here should have easily been prevented by a reviewer with knowledge of Chinese video game regulations. These reviewers might be rarer and therefore harder to find and convince to review a paper voluntarily, but this is still important. Maybe local experts, given their scarcity and other competing commitments, should then be compensated, so that their expertise could be competitively obtained. This will lead to a wider conversation about the current state of academic publishing and the ethics involved. As a side note, the proofreading of articles ought to be improved. Colder Carras et al. (2021) was incorrectly referenced as ‘Carrasp [...]’.

Finally, I am grateful that the authorship team of Zhou et al. (2024) has deposited their research data in a repository (Science Data Bank [科学数据银行]) upon request. The underlying data will be made publicly available after a one-year embargo in July 2025 via: <https://doi.org/10.57760/sciencedb.psych.00153>.

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Conflict of interest: L.Y.X. was employed by LiveMe, then a subsidiary of Cheetah Mobile (NYSE:CMCM), as an in-house counsel intern from July to August 2019 in Beijing, People’s Republic of China. L.Y.X. was not involved with the monetisation of video games by Cheetah Mobile or its subsidiaries. L.Y.X. undertook a brief period of voluntary work experience at Wiggin LLP (Solicitors Regulation Authority (SRA) number: 420659) in London, England in August 2022. L.Y.X. has contributed and continues to contribute to research projects that were enabled by data access provided by the video game industry, specifically Unity Technologies (NYSE:U) (October 2022 – Present). L.Y.X. has been invited to provide advice to the UK Department for Digital, Culture, Media and Sport and its successor (the Department for Culture, Media and Sport; DCMS) on the technical working group for loot boxes and the Video Games Research Framework. L.Y.X. was the (co-) recipient of three Academic Forum for the Study of Gambling (AFSG) Postgraduate Research Support Grants (March 2022, January 2023, & July 2024) and a Minor Exploratory Research Grant (May 2024) that were derived from ‘regulatory settlements applied for socially responsible purposes’ received by the UK Gambling Commission and administered by Gambling Research Exchange Ontario (GREO) and its successor (Greo Evidence Insights; Greo). L.Y.X. has accepted funding to publish academic papers open access from GREO and the AFSG that was received by the UK Gambling Commission as above (October, November, & December 2022, November 2023, & May 2024). L.Y.X. has accepted conference travel and attendance grants from the Socio-Legal Studies Association (February 2022 & February 2023); the Current Advances in Gambling Research Conference Organising Committee with support from GREO (February 2022); the International Relations Office of The Jagiellonian University (Uniwersytet Jagielloński), the Polish National Agency for Academic Exchange (NAWA; Narodowa Agencja Wymiany Akademickiej), and the Republic of Poland (Rzeczpospolita Polska) with co-financing from the European Social Fund of the European Commission of the European Union under the Knowledge Education Development Operational Programme (May 2022); the Society for the Study of Addiction (November 2022 & March 2023); the organisers of the 13th Nordic SNSUS (Stiftelsen Nordiska Sällskapet för Upplysning om Spelberoende; the Nordic Society Foundation for Information about Problem Gambling) Conference, which received gambling industry sponsorship (January 2023); the MiSK Foundation (Prince Mohammed bin Salman bin Abdulaziz Foundation) (November 2023); and the UK Gambling Commission (March 2024). L.Y.X. has received honoraria from the Center for Ludomani for contributing parent guides about mobile games for Tjekspillet.dk, which is funded by the Danish Ministry of Health’s gambling addiction pool (Sundhedsministeriets Ludomanipulje) (March & December 2023), and from the



YMCA (Young Men's Christian Association) of Greater Toronto Youth Gambling Awareness Program for a presentation, which is funded by the Government of Ontario, Canada (March 2024). A full gifts and hospitality register-equivalent for L.Y.X. is available via: <https://sites.google.com/view/leon-xiao/about/gifts-and-hospitality-register>. The up-to-date version of L.Y.X.'s conflict-of-interest statement is available via: <https://sites.google.com/view/leon-xiao/about/conflict-of-interest>.

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