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Dear Dr. Daniel,

**RE: Scholars' concerns about Children's Screen Time Action Network's letter to the American Psychological Association**

We, the undersigned scholars, are writing to express concern regarding a recent letter organized by the Children's Screen Time Action Network (CSTAN; affiliated with the Campaign for Commercial Free Childhood) and signed by a number of scholars. We are concerned regarding two related matters. First, the CSTAN letter contains numerous factual inaccuracies regarding the nature of current screen time research. Second, conflicts of interest, primarily regarding the organizing body (Campaign for Commercial Free Childhood) as well as undisclosed conflicts of interest among some signers (such as operating consulting business for tech companies or giving high-paid speeches on technology concerns) call into question the intentions of the CSTAN letter. We are concerned that, particularly in an ongoing environment of moral panic over "screen time," the APA might be misled into action that will provide no useful outcome for members of the public, and in doing so will harm the association's scientific credibility. Below we explain our concerns.

As a primary concern, the letter misrepresents the current literature on "screen time," suggesting that it is more consistent and shows definitive links to harms than is actually the case. This is done through an overemphasis on a small number of research studies, an exaggeration of the findings of said studies, and a failure to report on other studies that conflict with these claims. For example, one study (Twenge, Joiner, Roberts & Martin, 2017) is highlighted as demonstrating a link between smartphones and social media with depression and suicide in teen girls. But a closer look at the data renders this conclusion in doubt. For example, the magnitude of effect for the social media/depression link in girls is  $r = .06$  (0.36% of variance explained). The links were non-significant for boys. In other words, the effects of social media in fact appear to be small and can plausibly be the result of a statistical anomaly, given the size of the dataset from which these correlations are derived. At other points the CSTAN letter suggests that video game playing is related to reduced academic performance in boys, and insinuates, without any supporting evidence, that this might explain why fewer boys attend university than girls. However, a recent meta-analysis found little evidence to support the contention that video game playing is associated with reduced academic performance (Ferguson, 2015). Other research (Przybylski & Weinstein, 2017) suggests an inverted U-shaped effect curve, with the best outcomes seen among moderate users. However, even here the effect size for the most extreme users appears to be both very small and correlational in nature. In other words, many of the claims put forward in the CSTAN letter are at best overstated, and at worst the result of cherry-picked findings from the research literature.

In addition, much of the CSTAN letter appears to promote the notion that time spent on screens, screen time or “overuse” of screens is strongly predictive of negative outcomes. However, research evidence has not found this to be true, with time spent on screens generally a weak predictor of behavioral or academic outcomes (e.g. Dienlin, Masur & Trepte, 2017; Ferguson, 2017; Przybylski & Weinstein, 2017). Other research has indicated that *how* people use screens is more important than *how much time* is spent on screens, with screen use associated with both positive (e.g. Reinecke & Trepte, 2014) or negative (Davila et al., 2012) outcomes, depending on user actions and motivations. In addition, a recent meta-review by Meier and Reinecke (2018) concluded that the research literature often presents widely differing conclusions about the effects of technology on mental health, and that critically, there are severe universal conceptual and methodological limitations which make it difficult to reach any firm or consistent conclusions. As such, narratives that posit a “dosing effect” (e.g., they treat screens as if they were a dangerous substance whose use is strongly associated with risk), are outdated, not supported by research evidence, and create significant problems in appropriately communicating the science around screen time.

We think that it is also important to highlight the fact that the CSTAN letter relies heavily on the comments of a few former technology industry workers, which does not constitute meaningful evidence and should not be accorded the same weight as empirical findings. Industry leaders are known to exaggerate the influence of their own platforms. Perhaps the most infamous case is a study linking manipulations of feed content to user moods on Facebook (Kramer, Guillory & Hancock, 2014). This study caused widespread panic about the supposed powerful influence of Facebook until some psychologists pointed out the effect size was negligible (Grohol, 2014).

Regarding the ethics of psychologists working with technology companies, we are sceptical of claims in the CSTAN letter that psychologists are (a) deliberately working to “manipulate” or “exploit” children’s “vulnerabilities”, and (b) that this is happening as standard practice throughout the industry. This is a serious accusation and, as such, should be supported by evidence, yet the letter provides none. Making such unsubstantiated claims is likely to do more harm than good. Rather than calling for heavy-handed formal statements condemning entire industries, research psychologists should instead be trying to engage with industry professionals in order to share knowledge, data, and best practice to promote positive technology use, and minimize potential harm. While some scholars on the list of CSTAN letter signees would not see the value in this (indeed, a number have a history of claiming that those who disagree with them are “industry apologists,” which is neither substantiated nor productive), we argue that greater engagement would be an important step forward in moving the debate about screen time beyond sensationalist news headlines and exaggerated claims.

In line with this, we think that it is important to note that making blanket condemnations of technology, screen time, or psychologists’ involvement in technology industries undermines the ability of the APA to help address legitimate concerns. For instance, the practice of implementing loot box systems in games (wherein players pay for in-game rewards which are subject to an element of chance) may be a legitimate concern for players (Drummond & Sauer, 2018), although data on whether they actually are harmful or not remains lacking. Public statements by the

APA should not precede data. However, where the APA can have an influence is in incentivizing and promoting calls for open, pre-registered and transparent science. Given that the research in this area is currently hindered by undisclosed financial conflicts of interest (for example, authors who make earnings from speaker engagements and private consultancy on the topic) as well as suboptimal methodological practices, a move by the APA to promote best practices and improved standards in research would be welcome.

We are disappointed that, yet again, the public discourse around the effects of screen time and technology use are being marred by the use of emotionally evocative language, scaremongering, and a general lack of solid, open and reproducible evidence. As such, we suggest to the APA that the CSTAN letter does not provide a sound basis on which any action should currently be taken. Rather than making ineffective public declarations condemning unsubstantiated industry practices, we instead would advise that the association take a longer view on the matter, and encourage the use of open, pre-registered research. To that end, we believe that it is important for the APA to promote, among other things, the implementation of [Registered Reports](#) across its journals, adherence to the [Transparency and Openness Promotion \(TOP\) Guidelines](#), the use of [badges for Open Science](#), and to encourage scholars to sign up grassroots initiatives, such as the [Peer Reviewers' Openness \(PRO\) Initiative](#). Until such better methods become standard practice, screen time research can not and should not inform any policy or decision-making process.

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