



## COVID-19 PANDEMIC AND CHILD MENTAL HEALTH: AN INVITED DISCUSSION SECTION

# Rejoinder 2: Educating kids during a pandemic: More “farmers,” fewer experts

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As the late David Sackett contended, evidence trumps expertise, and expertise itself can lead to sinful acts, including the “unavoidable temptation to accept or reject new evidence and ideas, not on the basis of their scientific merit, but on the extent to which they agree or disagree with the public positions taken by experts on these matters” (1). Yet, evidence and expertise were each certainly missing in the handling of in-school versus at-home (virtual) learning during the SARS-CoV-2 pandemic. One is reminded of the polio epidemic nearly 75 years ago (2). Since that time, limited experience and planning about school closures have largely been related to inclement weather alerts (3).

There is almost no intervention or situation in which one’s level of certainty approaches 100% (4). This unquestionably was the case for the dynamic events that unfolded during the SARS-CoV-2 pandemic, which was neither the first time, nor the last time, that humans will be asked to carefully balance the weight of evidence about doing something for a net benefit, while attempting to limit realized or inadvertent harms to the few or many.

The current commentary in JCACAP (5) reminds us of the above. It also alerts us to the reality that clinical care and public health policy often each intersects with policies

generated within other sectors, such as child and adolescent education. The use of the word “nuance” in their commentary (5) cannot be underscored: not only were these aforementioned relationships rife with uncertainty, but they nakedly exposed the accompanying “courts” of public debate, steered by opinionated and often opportunistic epidemiologists, academics and physicians, alarmed unions, ill-prepared news reporters, and social media (6) never seen before – all amplified within echo chambers, and by mass hysteria (7).

While it is preferable to have some well-oiled prize fighter experts in your corner, the problem with the SARS-CoV-2 pandemic was that there were too many “experts”, and we had trouble deciphering experts from inexperts. One reason is that the SARS-CoV-2 was a “cognitive island” – defined as “places [or situations] where we have the narrowest set of resources for evaluating experts, which makes our expert dependencies particularly risky” (p.284, 8). Poorly chosen “authorities” within an environment with little data would be expected to lead to sub-optimal decisions.

The pandemic led to both the generation and publication of evidence around a myriad of effective (and ineffective) therapies, many properly tested using a randomized clinical trial (RCT) design (9). However, such a study design was

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considerably more difficult to initiate in relation to school closures and at-home learning. Even if one could complete a relevant RCT, important and measurable outcomes of optimal learning, socializing, mental well-being and the provision of daytime childcare (while parent[s] worked), might be countered by the outcomes of SARS-CoV-2 infection of the child, within-family transmission, and community outbreaks. Furthermore, evaluation of the first bundle of outcomes might need to continue years into the future, while the latter bundle might just be weeks or months. Let us also be reminded that the current era was one marred by a pre-existing high prevalence of mental illness and anxiety among youth (10), a climate of political leanings by adults away from the rational centre (leftward and rightward), and excess opportunities to share one's ideas through unfiltered social media, rather than peer-reviewed channels. Those charged factors could (and did) subvert the conduct of research, and could have further cross-contaminated clinical trial arms within a RCT.

In addition to those suggested in the current commentary in JCACAP (5), I would like to propose a few next steps – some best initiated now (when the pandemic has fortunately quieted down), and others readied for the possible next pandemic or another unforeseen catastrophe:

1. Require the establishment of functional inter-governmental channels, and a set of simple procedures for home (virtual) education, in the event of an infectious or non-infectious major event. These procedures would be developed in a manner, in which learning could quickly be moved from an in-school environment to an online approach, and vice versa. Akin to an annual school fire drill, central command would know what to do, as would the practised students and teachers.
2. Ensure that school closures and online learning are only initiated once some pre-defined threshold of risk has been met. In the absence of arriving at that threshold, a first do-no-harm (make-no-changes) approach must be maintained. That threshold could be defined by the point prevalence of the infection (e.g., > 10% of the population), and its dynamic upswing (velocity) of progression over a 1- or 2-week period. In the same vein, re-opening of in-person learning would soon follow after a fall of those metrics below the said thresholds.
3. Develop and research on-line learning methods, and make them as enjoyable and as engaging as possible. Even during stable times, when there is no school closure, ensure that online learning is rehearsed a few times in a school year – akin to a class trip, but in

which students stay home, and learn virtually for 1 or 2 days.

4. Admit that some kids do better outside of school – in terms of learning and social comfort – even though most need an in-school environment. Accordingly, not all students, parents and educators will be happy with the choices made about where and how learning will occur during tough times, like a widespread pandemic.
5. During the emergence of an infectious or non-infectious major catastrophic event, form a so-called “Science Advisory Table” that comprises individuals who understand evidence, and how to handle uncertainty. Surely, a retired school principal or experienced education leader should be a part of that group. Furthermore, include 1 or 2 people who think differently, especially those who can fix things when they break, and can solve problems not only through deliberation and cognitive processing, but also with their hands. One trade that comes to mind is the farmer: “Farmers deal with new challenges that arise on a near-constant basis, be it unpredictable weather, new pests, volatile prices, or changing customer preferences” (11).

All in all, Canadian did well through this last SARS-CoV-2 pandemic, and we are here to tell the story. Let us make sure that our kids too can share that story, though the written and spoken word, and also acquire the skillset of resilience.

## Conflict of Interest

The author has no conflicts to disclose.

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