

Impact of the COVID-19 pandemic on the delivery and adaptability of school food programs in Canada

Mavra Ahmed^{1,2}, Alana Richardson¹, Jessica Riad¹, Chelsea McPherson^{1,2}, Dan Sellen^{1,2}, Vasanti Malik^{1,2}

¹Joannah and Brian Lawson Centre for Child Nutrition, ²Department of Nutritional Sciences, University of Toronto, Toronto.

Background

The COVID-19 pandemic has had devastating consequences on food security and the nutritional quality of the diet of Canadians as many have been faced with reduced work hours and unemployment. Lower income and vulnerable groups have been disproportionately affected, further exacerbating existing disparities in access to healthful food.

Food insecurity among school children who are dependent on school meals for their nutritional needs has doubled as a result of fractured school operating schedules or long-term school closures impacting access to voluntary school food programs (SFP).

Objective

To conduct a systematic rapid review on the impact of the COVID-19 pandemic on the delivery, resiliency, and adaptability of school food programs across Canada.

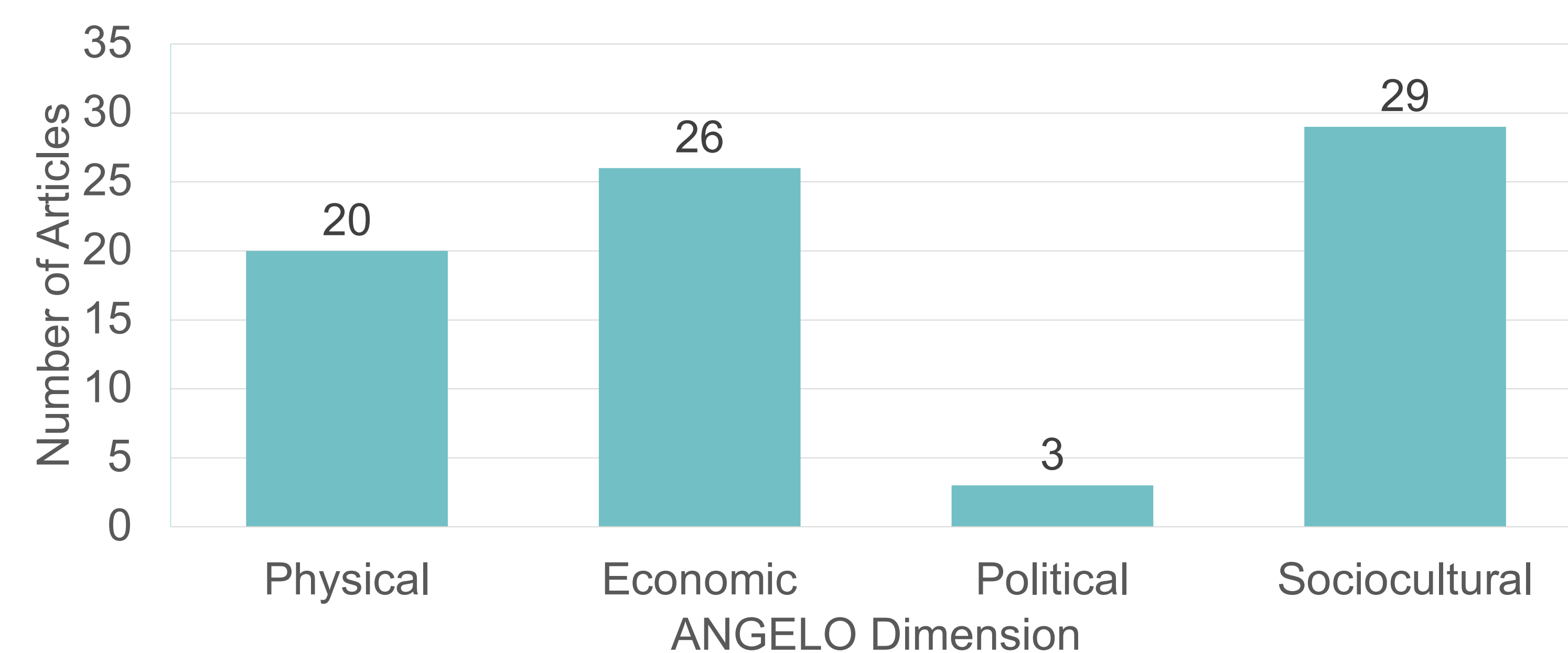
Methods

Given the rapid pace of knowledge dissemination related to COVID-19, we aimed to examine information published in the popular press.

Using relevant keywords, articles were systematically searched through a newspaper database (*Newstream*), complemented by a social media search with an online database *Social Search*. Articles were analyzed using the ANGELO (Analysis Grid for Environments Linked to Obesity Framework) and GTE (Getting to Equity Framework) to capture environmental aspects impacting SFP and to identify gaps in policies that would enable schools to feed children in emergency settings.

We conducted a content analysis to synthesize the common themes from both the ANGELO and GTE frameworks that emerged across the included articles

Figure 1. ANGELO Framework to capture adaptation of environmental aspects of school food programs during the COVID-19 pandemic



Acknowledgements

Joannah and Brian Lawson Centre for Child Nutrition. **Funding:** President's Choice Children's Charity Department of Nutritional Sciences (WHO Collaborating Centre), University of Toronto.

Results

The Impact of COVID-19 on School Food Programs in Canada

What is a School Food Program?

- School food programs provide students with healthy and nutritious meals.
- Children receive both reliable and safe access to food through such programs.



Canadian School Food Programs



- Canada does not currently have a national school food program in place.
- Current school food programs are organized by municipal, provincial, and territorial governments or non-governmental organizations.

The Impact of COVID-19 on Canadian School Food Programs

- Lockdown measures resulted in abrupt school closures and disruptions to school food programs, limiting access to food sources many children relied on.
- Many school food programs have adapted by implementing new modifications in order to continue providing students with food, yet have also met novel challenges in doing so.



Adaptations

- New collaborations within communities and with organizations to support modified school food programs.
- Expansions of existing school food programs to reach more students.
- Distribution of meal kits and freshly prepared meals.
- COVID-19 guideline adherence when preparing and distributing food.
- Increased government funding towards supporting school food programs.

Challenges

- Accessing food due to price gauging and loss of usual food suppliers.
- Expenses of modified programs hard to maintain, especially when led by small teams of volunteers.
- Lack of protein food group in meal kits.
- Unsustainability of certain modifications due to costs and supply issues.
- Logistical challenges of delivery and distribution.
- Increased barriers to food access experienced by families without internet access.

Of 35 articles identified, 24 were retrieved as newspaper articles and the rest were of various social media modes (wire feeds, blogs/podcasts and webinars).

Using the ANGELO framework, 83% of the articles focused on the sociocultural context, followed by 74% physical aspects and 57% on the economic aspects, while only 8% captured the political aspects (Figure 1).

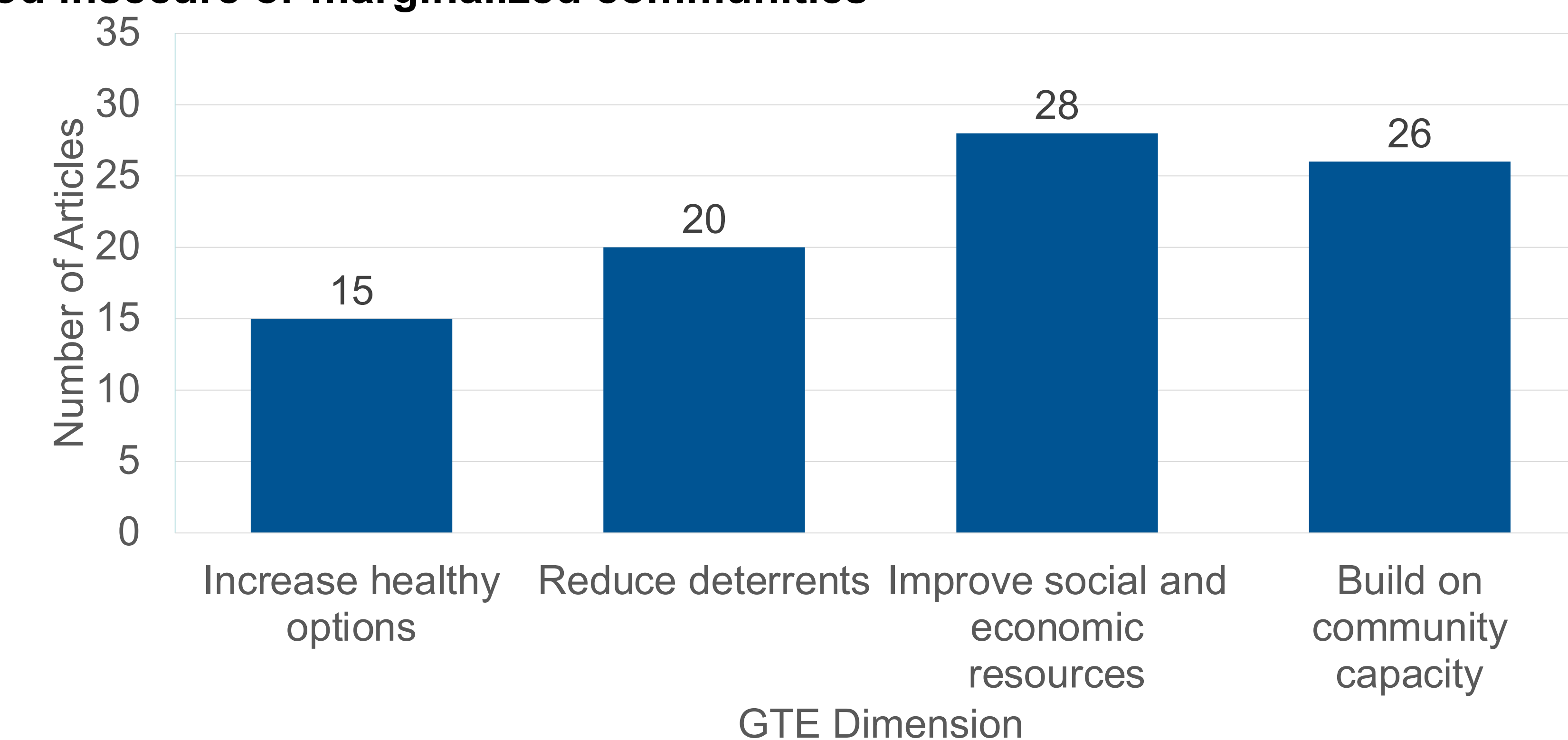
GTE framework was used to capture articles addressing adaptability of school food programs for food insecure and marginalized communities. The GTE framework identified 43% of articles focused on increasing access to healthy options, 57% on reducing deterrents to food access and building community capacity, and 80% on increasing social and economic resources (Figure 2).

Innovative community responses to continue deliverance of school food programs and addressing food insecurity included home deliveries, gift cards, online fundraisers, and food gift bags.

Programs that included food kits and prepared meals included some form of fruits, vegetables, dairy and grain products. Few also incorporated granola bars and savoury snacks like crackers.

Factor that was repeatedly mentioned as facilitating the continuation of school food programs during the pandemic was leveraging existing community partnerships and distribution channels.

Figure 2. GTE Framework to capture adaptability of school food programs for food insecure or marginalized communities



Conclusions

We identified the challenges and adaptations of school food programs across Canada, particularly the factors that played a role in the resiliency and continued delivery of school food programs.

The results of the study can be used in the future to create more sustainable and adaptable school food programs, especially during emergency feeding or particularly during school closures (e.g., summer time).

References

- Poole M (2021) *N Engl J M* **384**, e35.
- Angus Ried Institute (2020); angusried.org.
- Kinsey E (2020) *Am J Pub Health* **110**, 1635.

Contact: mavz.ahmed@utoronto.ca