

Conceptual Model to assess the Resilience Capacity of School Meal Programs: A Systematic Review and Thematic analysis

Kritika Gupta, MS, Georgianna Mann, PhD, Laurel Lambert, PhD, RDN,
Department of Nutrition and Hospitality Management, The University of Mississippi

Background

- Unprecedented school closures during the COVID-19 pandemic brought into question the resilience capacity of school meal programs.
- Resilience capacity is defined as the capacity to endure shocks and stressors including absorptive capacity (persistence), adaptive capacity (incremental adjustment), and transformative capacity (change).¹
- Resilience Capacity Model assesses the resilience capacity of a system based on the actors and corresponding components of that system.
- Resilience capacity has been explored in school nutrition setting but a Resiliency Capacity Model addressing school meal provision is lacking.

Objectives

The primary objective of this review is to qualitatively explore a conceptual model to assess the resilience capacity in the context of school nutrition. Other aims are (1) to understand how the school-based meal programs and interventions contribute to the resilience capacity of school meal programs, and (2) explore possibilities to build the resilience capacity of the school meal programs.

Results

- Of 406 articles identified via online search, 32 full-text articles met inclusion criteria.
- The strategies to build resilience include food availability, food accessibility, food quality, education, training, and support from parents, teachers, and administration.
- The Resilience Capacity Model can be used to assess whether the strategies adopted during unprecedented circumstances lead to a resilience or a vulnerability pathway.

Methods

Study Design, Settings, Participants

- Assisted by PRISMA, a systematic evaluation of peer-reviewed full-text articles published between 2005-2020 was performed.²

Measurable Outcome/Analysis

- Qualitative and quantitative studies explored the effect of school meal programs or in-school interventions on child food security that accounts for resilience capacity of school meal programs. Thematic analysis was used to identify factors associated with strategies for building resilience capacity.

Discussion

- Absorptive capacity is *the capacity of the school meal programs to meet the food provision demands of all children during unexpected times like a pandemic*. Absorptive capacity building strategies include provision of sufficient and nutritious food, accessible to all children.
- Adaptive capacity is *the incremental adjustment made in the implementation of school meal programs to accommodate the urgent need to provide school meals to those in need*. Adaptive capacity building strategies include utilization of school buses for food distribution, provision of grab-and-go meals, and volunteer donations and food drives through food banks in addition to the federal child nutrition waivers.^{3,4}
- Transformative capacity is *the change brought about in the implementation of school meal programs in the wake of emergencies which will continue to exist in the post-emergency operations*. Important in-classroom transformative capacity building strategies include modified cafeteria layouts, having school lunches in classrooms or designated places, adhering to the social distancing measures. Providing nutrition education for children, teachers, staff, and parents training for staff, universal free meals, permanent increase in number of meal provision sites outside schools, equitable distribution of meals, account for building transformative capacity.

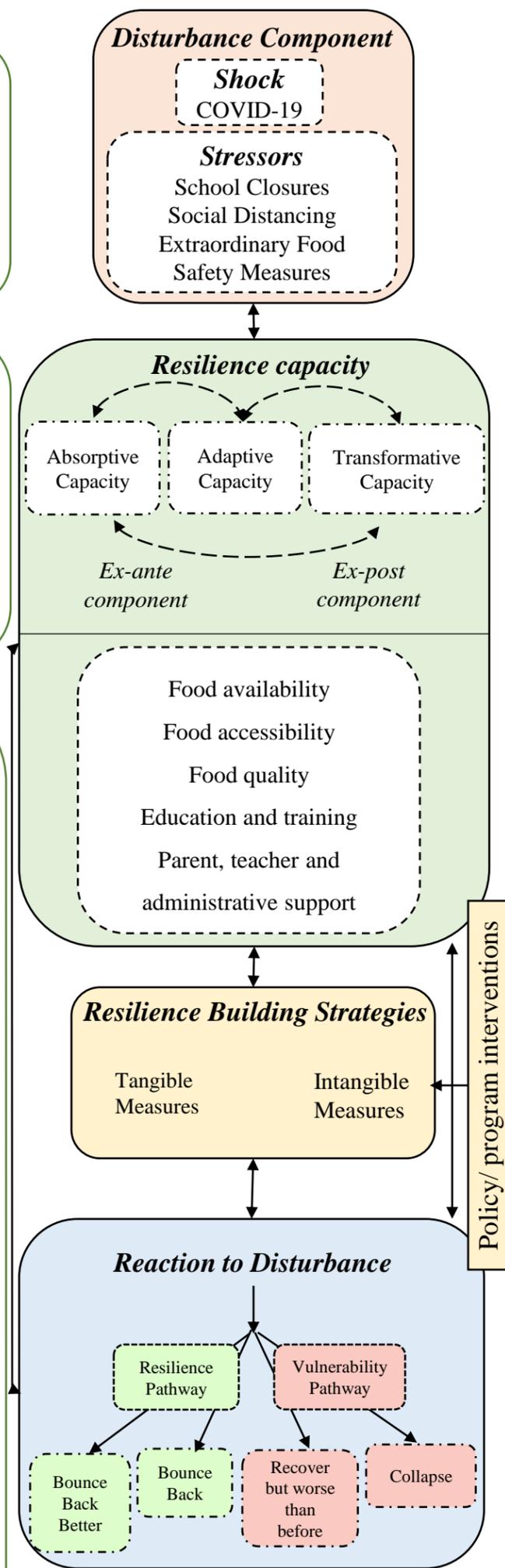


Figure 2. Conceptual model for resilience capacity of school meal programs

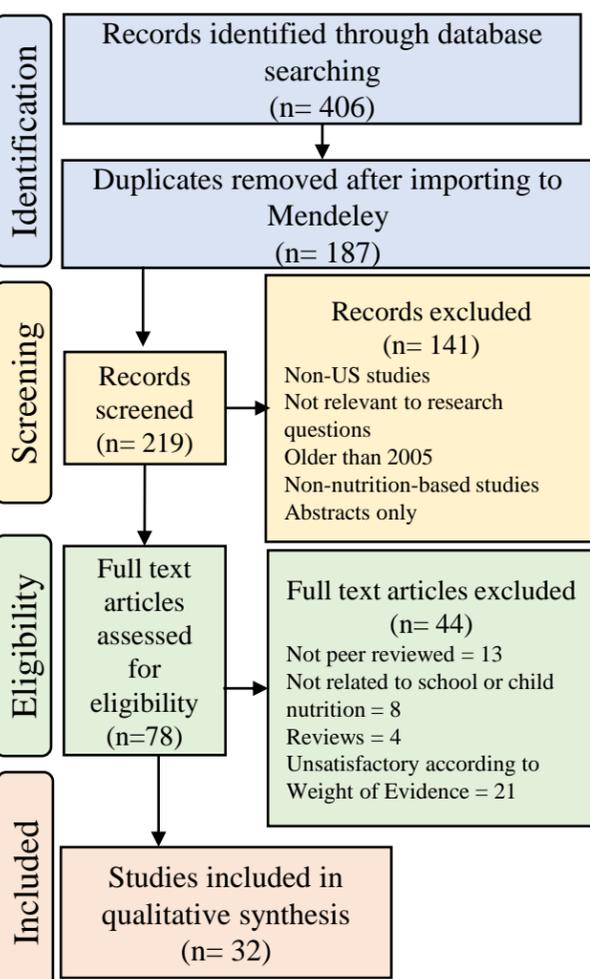


Figure 1. PRISMA flowchart

Conclusion

RCM can be used to assess program operations and better inform of support needed to enable resilience pathways. The conceptual RCM proposed in this review can be used to assess and analyze the resilience capacity of the current school meal programs and can also guide the formation of future nutrition programs. To assess the applicability of the model, extensive formative research is suggested to identify the indicators for all the three dimensions of resilience capacity, viz. absorptive, adoptive, and transformative capacity of school meal programs. In the current form, the indicators include the entire food flow process from menu decision to food distribution and secondary factors such as parent/teacher support.

References

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