



Applying a complex systems lens to school food environments in Nova Scotia

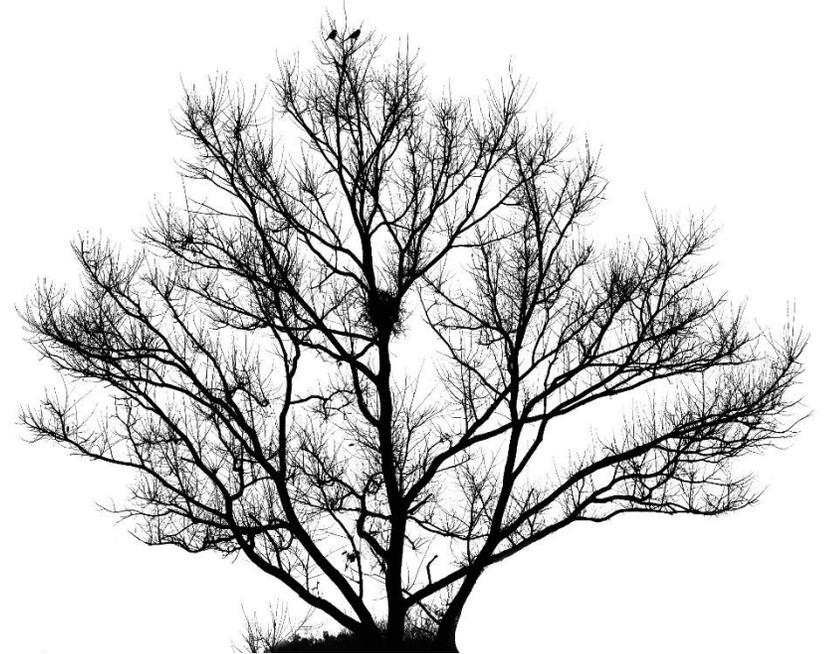
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Public Health 2018



School food environments

- Jurisdictions across Canada are encouraging healthier school food environments
- Barriers often reported due to lack of supports and resources
- Schools nested within communities – it is important to consider the broader system



Complex systems lens

- Various interconnected elements to create change in schools
- Systems-thinking recognizes the interrelationships and interactions across stakeholders, structures, processes and contexts



Study purpose

To use a complex systems lens to describe the interaction between system levels and stakeholder roles within the school food environment in Nova Scotia



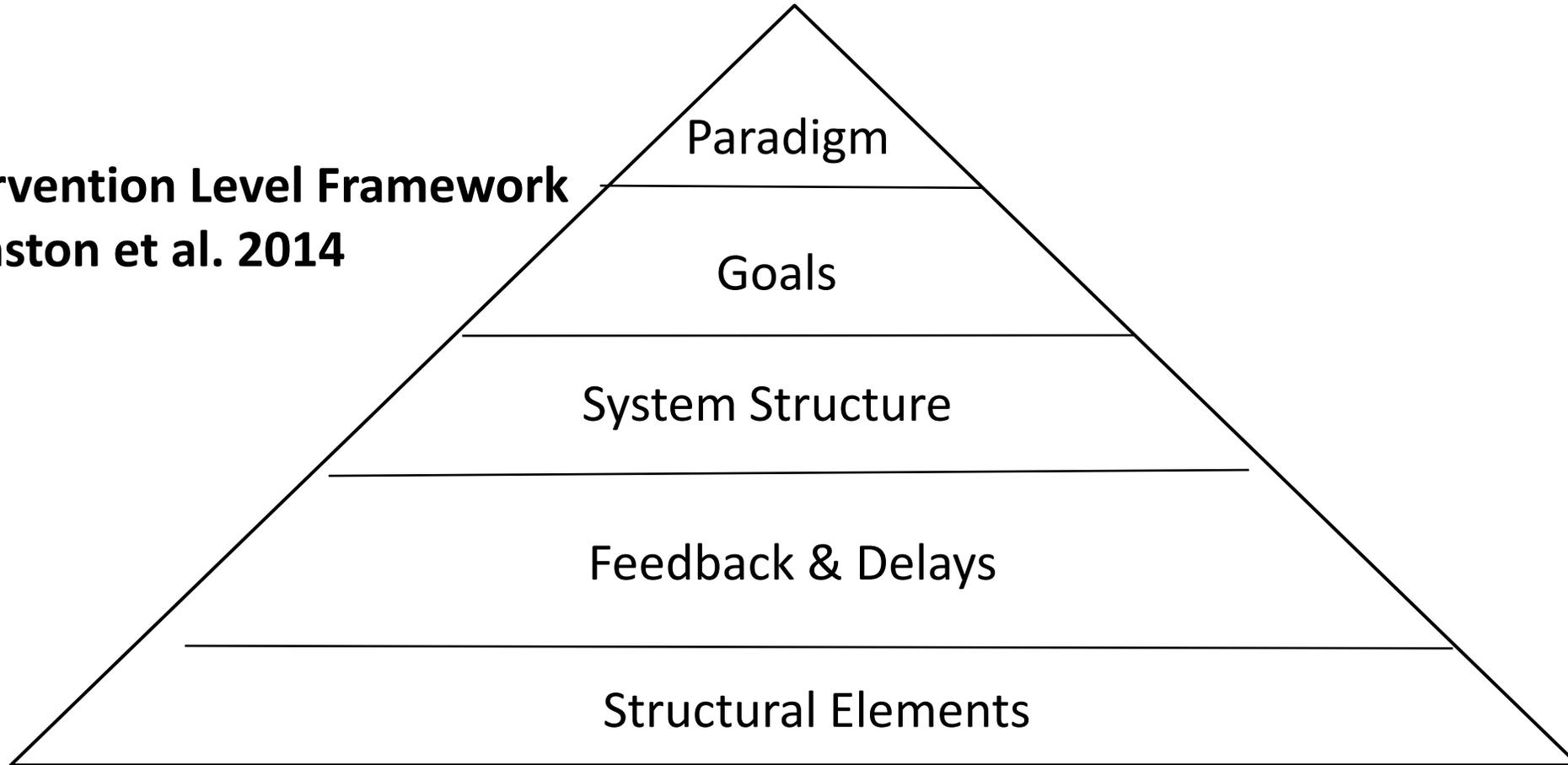
What did we do?

- Interviews (n=34) and consultations (n=13) were conducted with teachers, parents, cafeteria workers, public health staff and non-profit organizations
- Data coded using thematic analysis



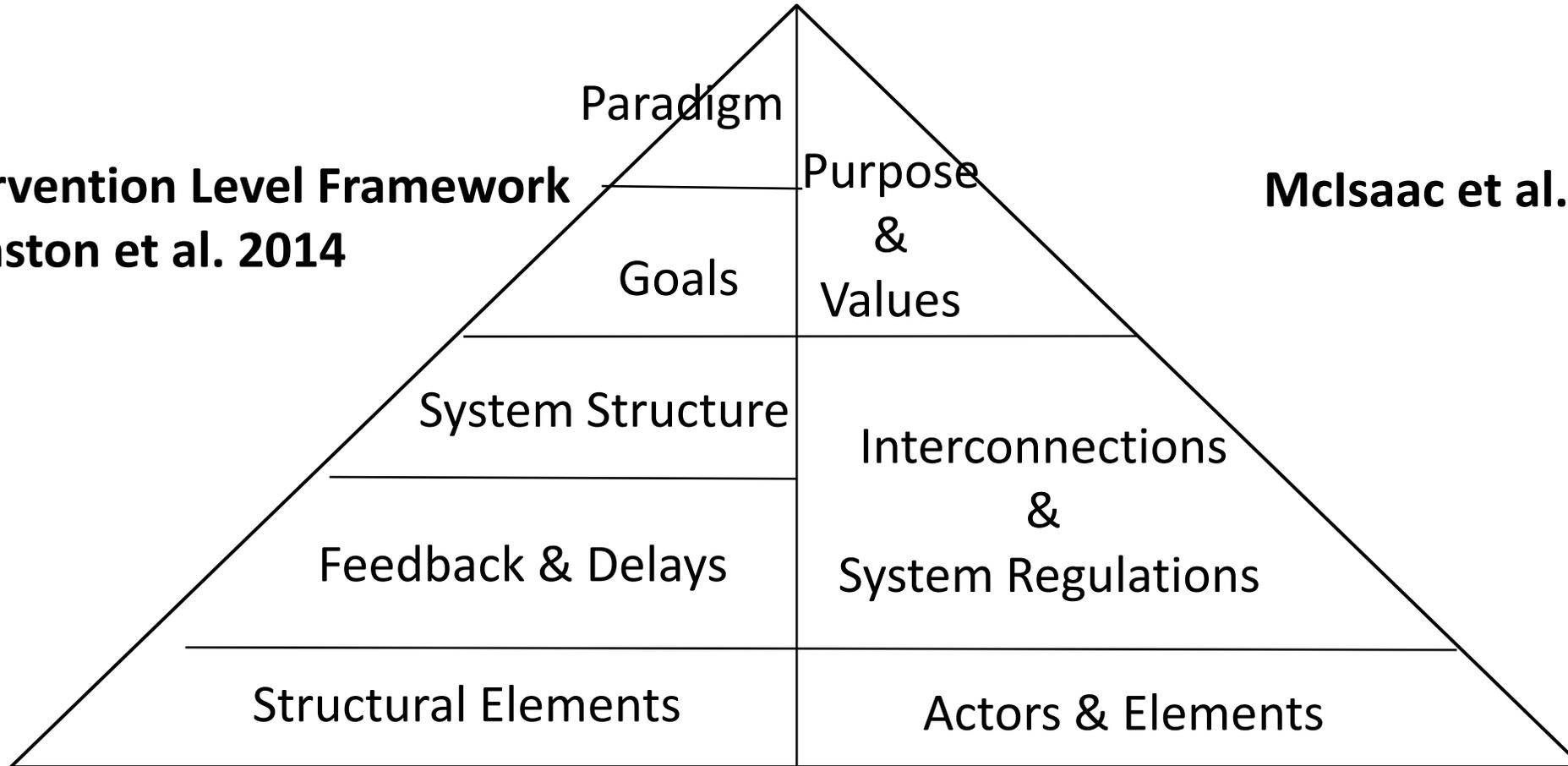
Complex systems framework

Intervention Level Framework
Johnston et al. 2014



Complex systems framework

**Intervention Level Framework
Johnston et al. 2014**



Mclsaac et al. 2018

Actors and Elements

Resources

“...how are you supposed to feed anywhere between 100 and 400 kids if you don’t have the space to hold the food?”
External stakeholder



Actors and Elements

Funding/Money

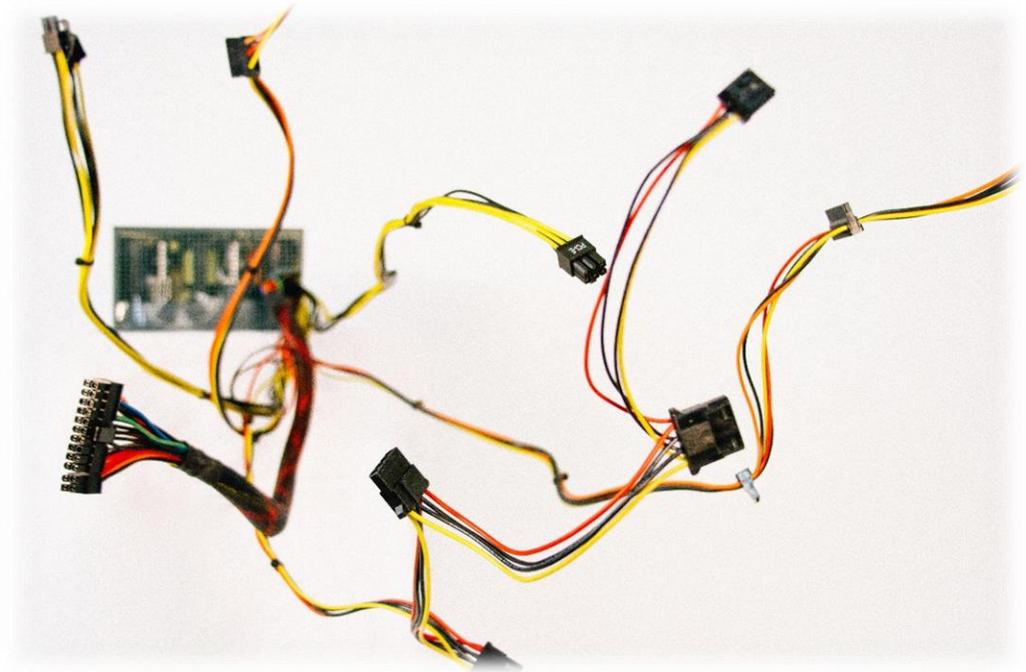
“...like before the profits were high but it wasn't healthy food because as you know, when you buy healthy you spend more, but I find that it's not as important to make a profit as it is to provide the service.” Cafeteria staff



System regulation and interconnections

Interacting roles and responsibilities of stakeholders

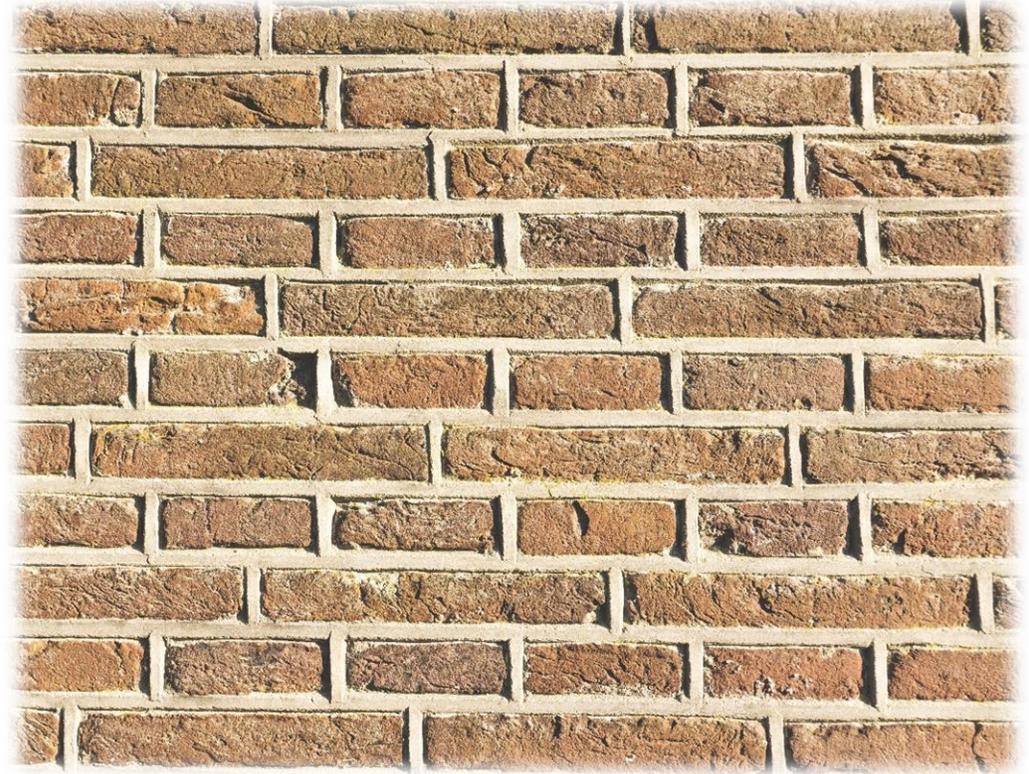
- Parents & students
- School staff
- School boards and government and external stakeholders



System regulation and interconnections

Healthy food access

“...food security is a huge issue and fresh fruits and vegetables for some people is just not an option all the time.” Teacher



System regulation and interconnections

Communication, collaboration and direction

“...“it’s really a multi um pronged approach. You know [...] it’s really collaboration and partnerships because again, the schools have a lot on their plate.” Public health staff



Purpose and Values

Control

“...we’re educators, you know, we need to inform kids on proper choices, healthy choices but at the same time they need to be able to be given that, the choice to make that choice” Teacher



Purpose and Values

Disconnect, alignment and priorities

“...I think it needs to be more holistic [...] ideally there would be pieces of curriculum that would reflect what they’re seeing at the cafeteria level and then what they’re being role modelled by staff and then there would be a policy that also supports that...” Parent



Purpose and Values

Food culture

“...“a nuisance to the school culture, it’s disruptive, it’s you know it’s something that, it’s only done at a certain time of day [...] I think the whole culture is just so backwards”. Parent



Conclusions

Interdependence of factors that influence how a school can create a healthy food environment

Importance of aligning system elements and targeting highest leverage points in the system





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