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# Targeted Educational Interventions to Increase Knowledge and Influence Attitudes about Nutritional Concepts in School-Aged Children

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# Targeted educational interventions to increase knowledge and influence attitudes about nutritional concepts in school-aged children.

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## Abstract

Good nutritional habits have been linked to increased overall health and wellness, therefore working with children has the greatest impact on their overall lifestyle and lifelong habits. Nutritional interventions decrease the risk of future health complications that can result in premature death. This study aims to evaluate the knowledge base of school-aged children sampled from an existing after-school nutrition education program and measure the efficacy of an additional two-step intervention. Our two-step intervention includes a content knowledge educational intervention on day one and a play-based learning intervention on day two to allow for knowledge acquisition and subsequent application of knowledge to improve retention. The intervention will be analyzed with a pre- and post-survey to evaluate the impact on the experimental group and to compare the intervention to a control group. We hope this intervention will yield positive attitudes toward healthy food choices. If so, similar interventions can be implemented in school and/or in after-school programs to help improve nutritional knowledge in children.

## Background

- There is room for improvement when it comes to educating children on nutrition as evidenced by food preferences and the prevalence of nutrition-related health conditions.
- Children are not receiving nearly enough formal nutritional education to bring about changes in behavior and attitude.
- Our educational interventions are guided by Vygotsky's sociocultural theory and Bandura's social cognitive theory.

## Research Question and Hypothesis

Question: Will targeted educational interventions increase knowledge retention and influence attitudes about nutritional concepts in school-aged children?

Hypothesis: We propose a directed knowledge and application intervention will increase nutritional content knowledge compared to the control group.

## Significance

- All children's food preferences are learned and can be positively influenced.
- Arenas for children to explore and learn about nutrition are limited.
- Play-based nutritional learning has been shown to increase students' nutritional knowledge acquisition.
- Successful curricula require specific initiation, implementation, and institutionalization process.

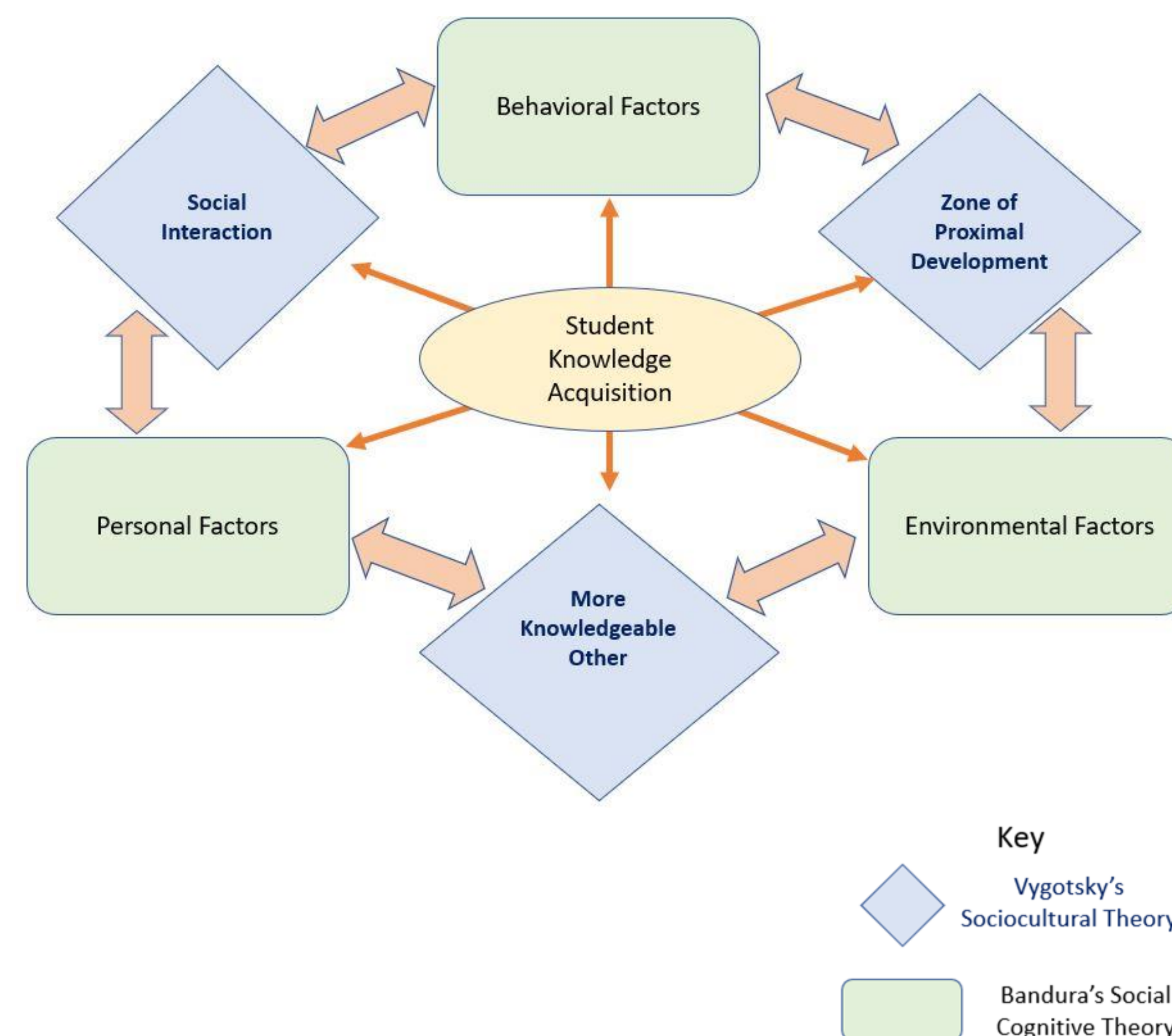
## Methods

- Convenience sampling, n=60, children aged 5-18 recruited from an existing after-school nutrition education program.
- Pre- and Post-testing - expectation of 40%-50% paired responses due to variable attendance.
- Control group to address confounding variable of existing interventions in the after-school program.
- Two-step intervention:
  - Day 1 - structured, instructional session
  - Day 2 - Play-based learning intervention for application of knowledge

## Interprofessional Roles and Responsibilities: The Counseling Perspective

- Poverty can impact the available nutrition provided by the parents.
- Poor nutrition can negatively impact academic success.
- School counselors should be involved in ensuring that good nutrition is available to promote success.
- Associations between unhealthy dietary patterns and mental health should be considered when working with adolescents.
- Societal pressure on weight and appearance can impact an adolescent's food choices.

## Research Theoretical Framework



## Expected Results and Analysis

- Student's knowledge retention is improved with intervention.
- Student's attitudes toward food choices is influenced toward nutritious alternatives.
- Application of nutrition information during play-based intervention will improve knowledge retention.
- Results will be analyzed with a repeated measures ANOVA to evaluate impact of intervention as compared to the control group.
- We predict there will be a statistically significant within-group variance in the experimental group, but not within the control group.
- We predict there will be a statistically significant between-groups variance.



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