Research Article Analysis

“Garden-Enhanced Nutrition Education Curriculum Improves Fourth-Grade School Children’s Knowledge of Nutrition and Preferences for Some Vegetables”

by Jennifer Morris and Sheri Zidenberg-Cherr

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Synopsis:

This study evaluates the effectiveness of a one-year comprehensive nutrition education program for fourth graders. Three schools from a local school district were chosen to participate. One school was designated as the control site where students received no formal nutrition or gardening education. The students of the second school received only in-class nutrition lessons, while the students of the third school received in-class nutrition lessons as well as hands-on gardening activities. A nutrition knowledge questionnaire and a vegetable preference survey were the instruments used to evaluate the curriculum. Students were given pre-tests and post-tests for comparative purposes. The results showed support for including vegetable gardens within the school setting.

Analysis:

Jennifer Morris and Sheri Zidenberg-Cherr conducted a quantitative quasi-experimental study. The treatments were applied to the school rather than the students in a non-random manner. Randomization was not possible because of the constraints of the school district but schools were matched based on students’ demographic profile. The procedures used and methodology are described in sufficient detail. Concern for the safety and protection of the participants was shown by obtaining parental consent and obtaining procedural approval from the Committee on the Use of Human Subjects.
The reliability of the nutrition knowledge multiple-choice test was quantified as 0.81 and was determined by using a group of students not exposed to the intervention who had similar demographics. The internal consistency reliability of the test was not mentioned, but content validity was evaluated by several nutrition professionals. The test was read aloud to each class to account for various reading levels. Although students were allowed to complete the vegetable preference survey on their own, several investigators had previously validated the methodology used for it. Data from both instruments was analyzed separately. Any limitations to the study were presented and explained by the researchers.

Conclusion:

Jennifer Morris and Sheri Zidenberg-Cherr present a well-planned and well-structured study that meets numerous criteria for reliability and validity. The results of the study lend support to the inclusion of vegetable gardens within the school setting. Although all studies are flawed in some respect, the researchers of this study provide solid research to support their findings.