Nutrition Literacy Predicts Diet Quality in College Students

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Introduction

Nutrition Literacy (NL) is the degree to which individuals can obtain, process, and understand nutrition information/skills to make appropriate nutrition decisions. NL is associated with Diet Quality (DQ) across populations including adults with chronic diseases,[1] patients with breast cancer,[2] and parents of young children.[3] Nutrition Literacy is comprised of three domains:

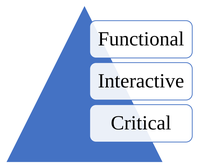
- *Functional NL* – Declarative knowledge surrounding basic nutrition concepts such as components of a healthy diet.
- *Interactive NL* – The ability to apply nutrition knowledge to make healthful nutrition decisions.
- *Critical NL* – The ability to critically appraise nutrition information and advocate for a healthier food environment.

College students are at high risk of having poor diet quality. Most consume diets low in fruits and vegetables, and high in saturated fat, a dietary pattern known to lead to poor health outcomes later in life.[4]

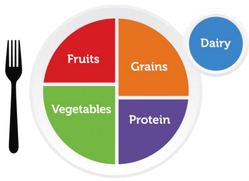
The objective of this study was to assess the influence of NL on DQ in college undergraduate students.

Methodology

In this descriptive cohort study, a cross-sectional convenience sample of undergraduate students completed an online survey that assessed health characteristics and behaviors including NL and DQ.



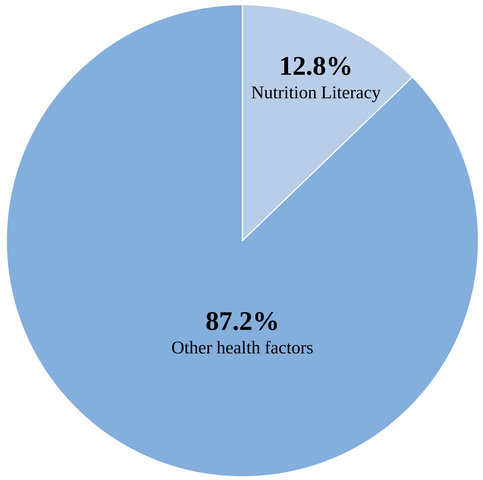
Nutrition literacy was measured using the Young Adult Nutrition Literacy Tool. Nutrition literacy was scored on a scale of 0-5, with higher scores indicating increased NL.



Diet quality was assessed using the Short Healthy Eating Index (sHEI). Diet quality was scored on a scale of 0-100, with higher scores indicating more healthful DQ.

Multiple regressions were used to determine if total NL predicted DQ and if so, which domains of NL (functional, interactive, or critical) were significant in predicting DQ.

Nutrition Literacy explained 12.8% of variance in Diet Quality in college undergraduate students.



These findings suggest a need for greater understanding of Nutrition Literacy in college students and highlight the potential of **improving Diet Quality** by **improving Nutrition Literacy.**

Acknowledgements

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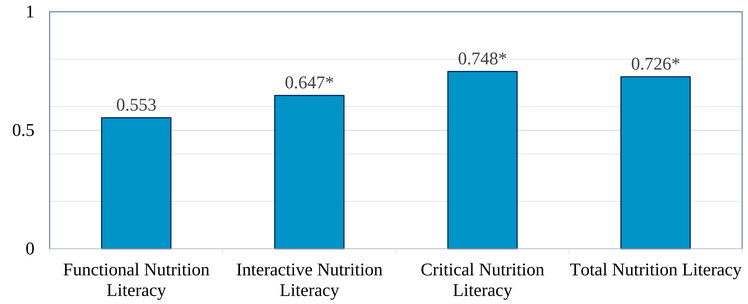
Results

Participants (N=841) were an average of 20.9 (±2.3) years old, mostly White (89%), and female (70%). The average sHEI score was 49.4 (±10.3) out of 100, indicating poor to moderate DQ.

Nutrition Literacy Domain Correlations with Diet Quality Measures (sHEI scores)



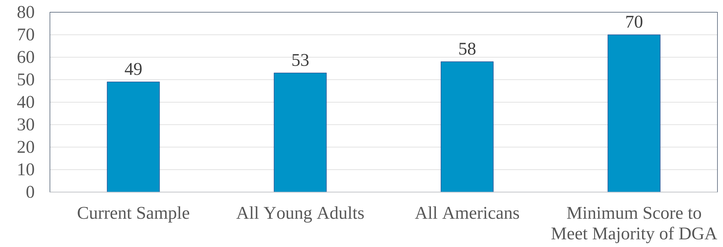
* P values <0.05 considered statistically significant.

Total NL was a significant predictor of DQ (r2=0.113, F (1,880)=111.760, P<0.001). Two domains of NL (interactive and critical) explained 12.8% of variance in DQ (r2=0.131, F (3,878)=44.229, P<0.001). Interactive NL (β=0.267, P<0.001) and critical NL (β=0.122, P=0.001) significantly predicted DQ, but functional NL did not.

Discussion

DQ was worse in college students compared to all young adults.

HEI Scores



Consistent with the literature on NL in other populations,[1-3] NL was positively associated with diet quality in college students. This study uncovered the novel finding that NL (specifically, interactive and critical NL) accounted for 12.8% of variance in DQ. This is an important finding, as more healthful dietary patterns can aid in the prevention of chronic diseases and conditions later in life.[5] This research highlights a need for understanding NL in college students and the potential of improving DQ by improving NL.