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Abstract

The Development of a Psychometrically Valid and Reliable Questionnaire to Assess the Nutrition Knowledge of Early Childhood Education Teachers †

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† Presented at the 2019 Annual Meeting of the Nutrition Society of New Zealand, Napier, New Zealand, 28–29 November 2019.

Published: 13 December 2019

With more children being enrolled in childcare, caregivers can play an important role in promoting children's nutrition education and healthy eating. Accurately identifying nutrition knowledge gaps amongst caregivers is necessary for providing them with relevant professional development and support to achieve this. Our aim was to design an early childhood education (ECE) teacher nutrition knowledge questionnaire that satisfies psychometric criteria of validity and reliability.

Items included were based on New Zealand Ministry of Health infant feeding and nutrition guidelines, literature and expert advice. University nutrition students completing a Bachelor of Science (BSc) in Human Nutrition (n = 40), and students with no nutrition background (n = 51) completed the questionnaire to assess construct validity; 35 BSc Human Nutrition students completed the questionnaire two weeks later to assess reliability. The Mann-Whitney-U test and a median-split table were used to assess construct validity, and Pearson's product-moment correlation was used to assess test-retest reliability.

Nutrition students achieved higher total and sub-category scores ($p < 0.01$). All nutrition students scored above the median of the combined group; 82% of non-nutrition students scored below the median. In the testing for reliability, first and second administration median scores for total and sub-categories were significantly correlated (r = 0.43–0.78; $p < 0.01$).

The questionnaire achieved construct validity and test-retest reliability and can measure ECE teachers' nutrition knowledge for pre-schoolers.