

Concurrent validation of the CHEERS survey and the mindful eating questionnaire.

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BACKGROUND

Children's eating and activity patterns are strongly influenced by early childhood social, cultural, and physical environments surrounding the eating and activity experience. The creating healthy eating environments in childcare (CHEERS) survey is a 59-item audit tool that can be self-administered to measure gaps, weaknesses, and strengths of early childhood education and care (ECEC) centre-based nutrition and physical activity environment. It has undergone content and criterion validation, and intra- and inter-reliability testing but has yet to undergo concurrent validation.^{1,2} The mindful eating questionnaire (MEQ) is a validated tool that provides a non-judgemental awareness of physical and emotional sensations with eating.³ CHEERS and MEQ measure overlapping constructs related to healthy eating constructs. The purpose of this study was to concurrently validate the CHEERS audit tool with the MEQ.

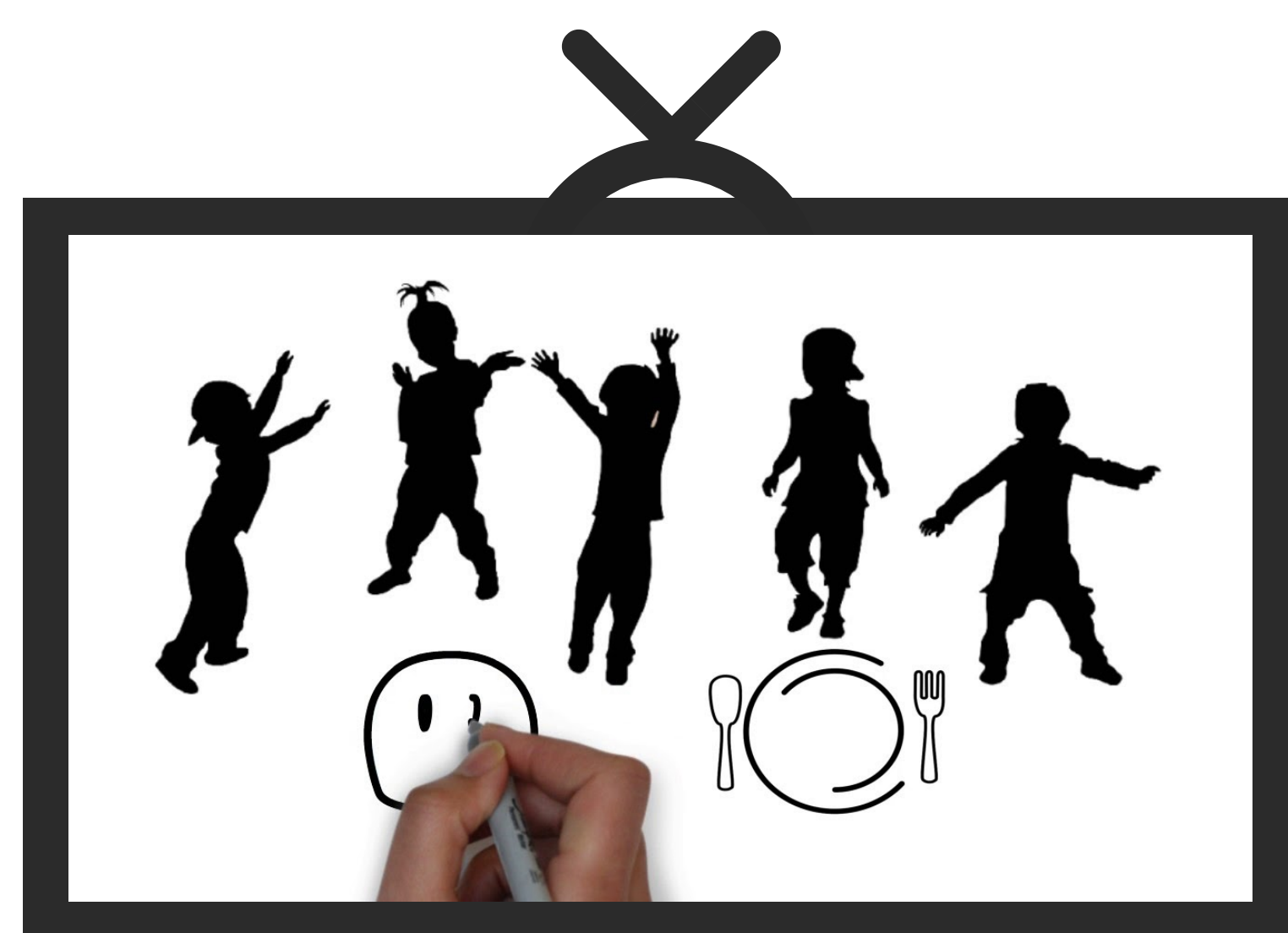


Figure 1: Short video description of the CHEERS tool

<https://rebrand.ly/CHEERSreport>

Methods

Educators from ECEC centres in Alberta were recruited as part of a larger study to determine the impact of a 10-month well-being intervention focused on nutrition, physical activity, personal health, and sleep on the ECEC environment and educator professional practice. Educators completed the CHEERS and MEQ tools to provide a baseline measure of current practice. Pearson r correlation coefficient was calculated on the four subscales of the CHEERS score (food served, healthy eating environment, healthy eating program planning, and physical activity environment), the MEQ subscores and overall score, and educator age using SPSS v26. Approval to conduct the study was obtained from Mount Royal University Human Research Ethics Board.

RESULTS

A total of 212 educators with a mean age of 38.3 ± 8.9 years from 42 ECEC centres across Alberta participated in the study.

Figure 1: MEQ subdomain of awareness positively correlated with the CHEERS healthy eating program planning.

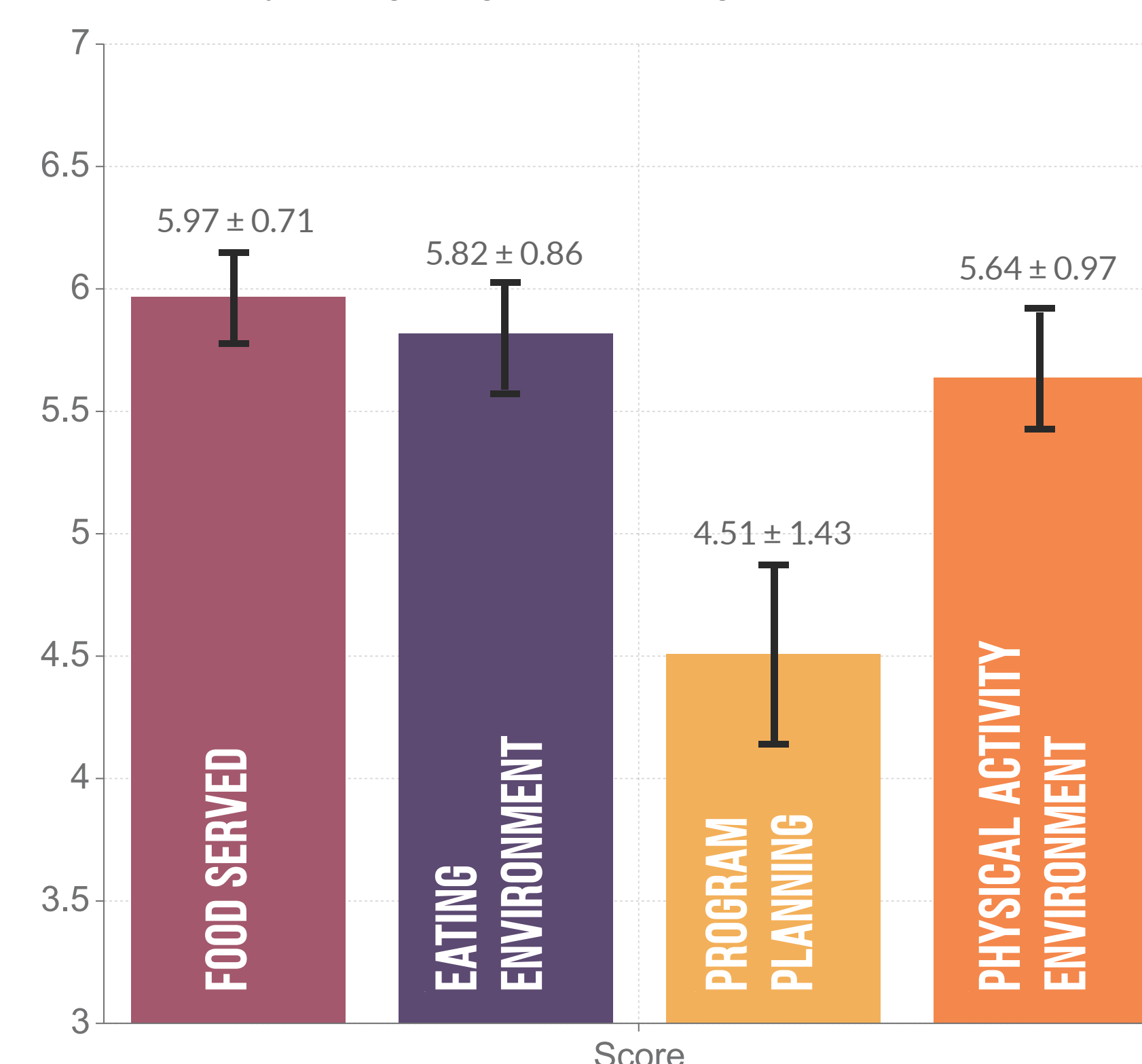


Figure 2: MEQ subdomain of awareness positively correlated with the CHEERS healthy eating environment.

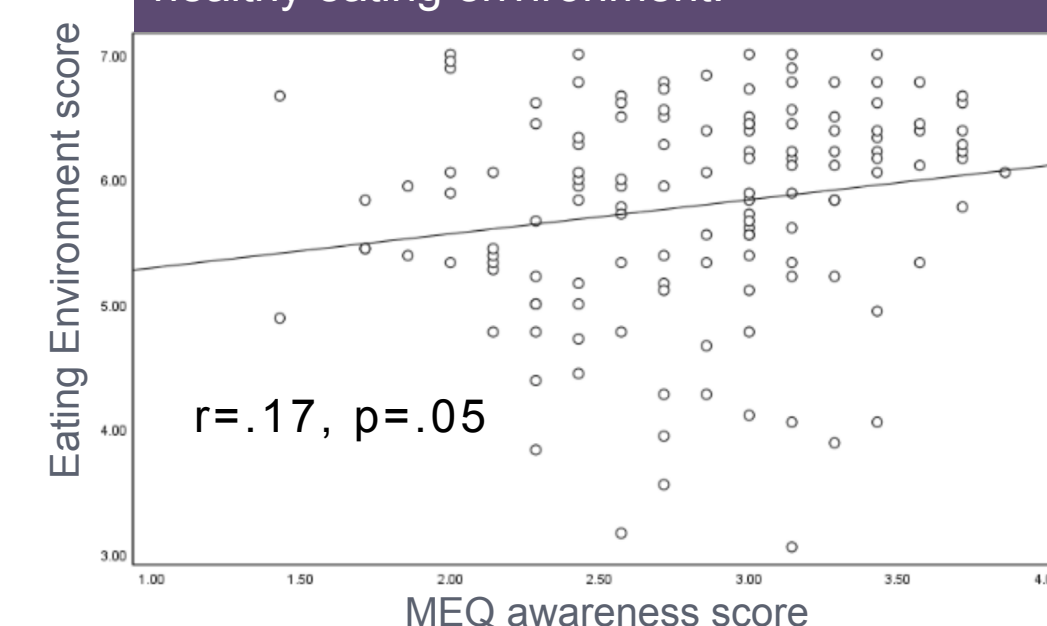


Figure 3: MEQ subdomain of awareness positively correlated with the CHEERS healthy eating program planning.

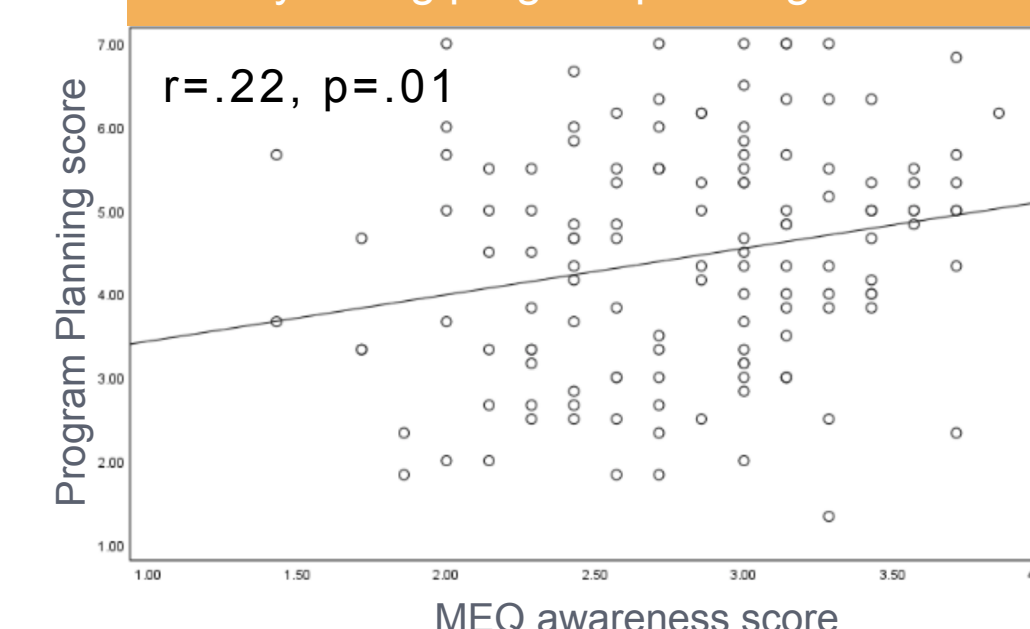
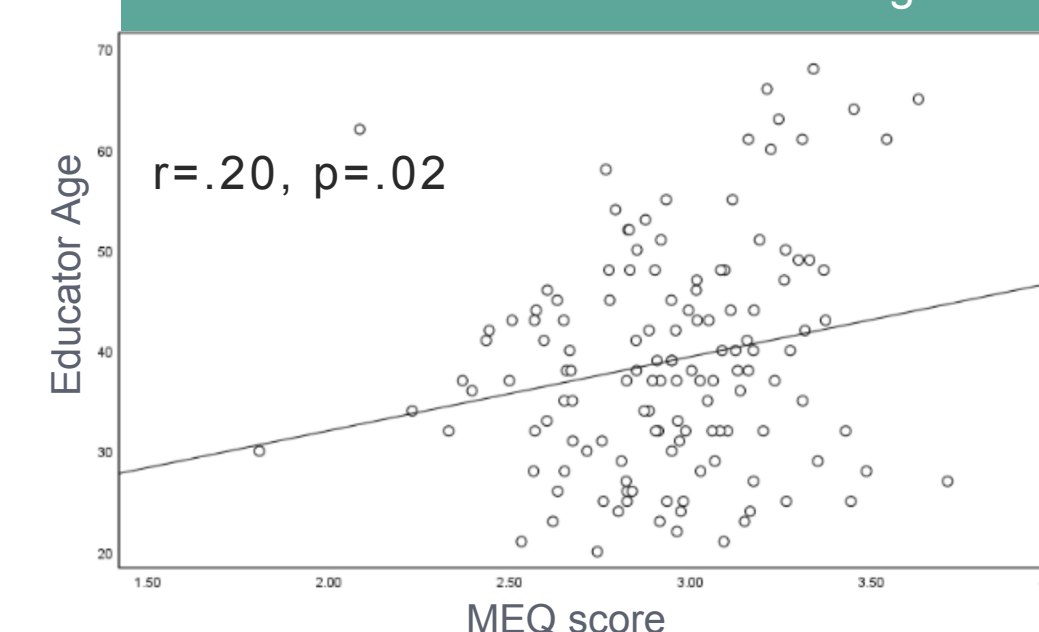


Figure 4: Overall MEQ score positively correlated with child care educator age.



DISCUSSION

The alignment between the MEQ awareness subscale with the CHEERS Healthy Eating Environment and Program Planning subscales provides evidence of concurrent validity for the CHEERS audit tool. Tool development is an iterative process and evaluating tools against similar measures provide additional validation measures which help strengthen the understanding of the psychometric properties of the tool within a given context.

Mindful eating has been demonstrated to have a positive relationship with healthy eating practices.^{4,5} The MEQ consists of five subscales and the Awareness subscale reflects an individuals' ability to recognize food characteristics and foods' effect on one's internal state. The Healthy Eating Environment CHEERS subscale reflects items that address ECEC educator's promotion and teaching of positive eating practices and attitudes towards food. The Program Planning CHEERS subscale reflects incorporation of nutrition education into the ECEC daily curriculum.

A critical aspect of a tool is that it measures what it purports to measure. The assessment of a modest relationship between MEQ awareness subscale and the CHEERS subscales provides evidence that they are measuring similar although not identical constructs. This study adds further validity to the CHEERS subscales in accordance with psychometric testing of audit tools.

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