We present a systematic review of Mealtime Emotional Climate (MEC) at home. Results showed that dietary intake, Body Mass Index (BMI)/weight status, and disordered eating are correlates of MEC. However, there is a lack of consistency among definitions and measurements of MEC.

Aims

**Aim I:** To examine child level correlates of MEC. **Aim II:** To examine how researchers have defined and measured MEC in past studies.

Methods

The protocol was registered with PROSPERO (CRD42019120135) and guidelines for PRISMA were followed to improve the reporting quality. The following databases were searched: PsycINFO, PubMed, and ERIC.

Inclusion Criteria

- Measured emotional climate during mealtime
- At least one measure of child nutrition, child physical health, or a child developmental characteristic
- Emotion was measured in more than one person
- Included typically developing children or a control group with typically developing children
- Published between January 1, 1980 and April 30, 2020.
- Study samples included human children and adolescents from birth to age 18.
- Study were quantitative cohort (cross-sectional or longitudinal), case-control (cross-sectional or longitudinal), intervention (randomized or nonrandomized) or experimental designs.
- In case-control studies or interventions, the sample size was at least n >10 per group or n >20 total. In cohort studies, the sample size must be at least n >20 total.

Data Extraction and Quality Assessment

- Quality was assessed using the National Heart, Lung, and Blood Institute’s quality assessment tools (National Heart, Lung, 2020).

Results: Aim I

**Correlates of MEC and Child/Adolescent Outcomes**

**Dietary Intake 1-5**
- A positive association was found between MEC and dietary intake.
- Of the 3 studies examining healthy dietary intake, all found a positive association.
- Of the 3 studies examining unhealthy dietary intake, 2 found a positive association and one found no association.

**Disordered Eating Behaviors 6-8**
- A negative association between MEC and disordered eating behaviors was found.
- Three studies examined the relationship, and all found a positive MEC to be associated with less disordered eating behaviors among adolescents.

**Weight Status/BMI 9, 10**
- A positive association was found between MEC and weight status/BMI.
- Five studies examined the relationship, 3 found a positive association, 1 found mixed associations, and 1 found no association.
- Varied evidence supports a more positive MEC is associated with lower weight status/BMI.

**Developmental Outcomes 9, 11-13**
- Other potential correlates examined include: child temperament, mealtime behavioral problems, aggression, prosocial behavior, sociometric ratings, depression, physical activity, and academic success.
- Due to lack of evidence no conclusion can be drawn for their relationship with MEC.

Results: Aim II

**Definitions and Measures of MEC**
- To the best of our knowledge, no consistent definition or operationalization of MEC has been identified.
- Across studies, definitions focused generally on dyadic interactions during mealtimes, mealtime atmosphere, conflict during or because of meals, emotional expression, or communication during meals.
- Nine studies measured MEC using an observational coding system and four utilized self-report measures completed by parents or adolescents.

Conclusions

**Aim I. Correlates of MEC**

- Healthful dietary intake, unhealthy dietary intake, disordered eating behaviors and weight status/BMI were conclusively identified as correlates of MEC.
- More research is needed to examine the relationship between MEC and child/adolescent developmental characteristics.

**Aim II. MEC Definition and Measures**

- There is little consistency in measurements and definitions of MEC across studies.
- MEC was assessed more commonly with direct observation and coding schemes, than with parent-report questionnaires.
- However, only three studies used the same coding scheme to assess MEC, limiting our capacity to compare findings across studies.

Information

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Figure 1. Frequency of MEC Measures Used Across Studies