



Undergraduate

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## INTRODUCTION

- Food security status describes the extent to which families have access to the quantity of food needed to live a healthful, active lifestyle (Grutzmacher & Gross, 2011).
- To prevent the current Covid-19 pandemic to spread, many countries declared lockdowns and quarantines including Malaysia whereby the government implemented the Movement Control Order (MCO) on 18<sup>th</sup> March 2020 (Abdullah, Mersat, & Wong, 2021).
- This causes individuals to lose job and reduced income, which leading to food insecurity (Lim, 2020).
- Therefore this study aims to determine food security and its association with eating behaviour among Malaysian children during the Movement Control Order.

## OBJECTIVES

- To determine the food insecurity using Radimer/Cornell Hunger Insecurity instrument.
- To determine the eating behaviour of children using Children's Eating Behaviour Questionnaire (CEBQ).
- To determine the correlation between food security and eating behaviour of Malaysian children during the Movement Control Order (MCO).

## METHODOLOGY

### Study design

### Cross-Sectional Study

### Study Location

### Malaysia

### Study sample

Parents of Malaysian children aged 2 to 11 years old (n =145)

### Sampling method

Purposive and snowball approaches

### Study Instruments

- Food security:** Radimer/Cornell Hunger and Food Insecurity Instrument
- Eating behaviour:** Children's Eating Behaviour Questionnaire (CEBQ)

### Data Analysis

- Descriptive statistics (frequency percentage, mean and standard deviation),
- Independent samples t-test.
- Point-biserial correlation.

## DISCUSSION

- The prevalence of households food insecurity and child hunger were 64.8% and 29.6%, respectively.
- The prevalence of household food insecurity was twice compared to 29.6% reported by An et al. (2015), however, the prevalence of child hunger was slightly lower than the 35.0% reported in the same study.
- Mean scores for EF and SE were in the range of SEANUTS study (3.61-3.80 and 2.31 – 2.70, respectively) and the rest of the mean score domain were higher than the SEANUTS Study (Tay et al., 2016).
- The rest of the domains that includes EOE, DD, FR, SR, FF and EUE exceeded the mean range values of SEANUTS Study (Tay et al., 2016).
- The difference could be owing to small sample size adopted in this study.
- Children living in food insecure households had significantly higher ( $p < 0.05$ ) EF, EOE, FR and EUE mean scores than its counterpart.
- In contrasts, children living in food secure households attained a significant higher ( $p < 0.05$ ) score in SE than those from food insecure households.
- There was a significant moderate positive correlation ( $r_{pbis} = 0.333$ ,  $p < 0.05$ ) between food approach behaviour with household food insecurity.
- This can be due to children from food secure households may adopted to snacking behaviour, which contributing to loss of appetite (Ambikapathi et al., 2018).

## CONCLUSION

- The prevalence of household food insecurity during the MCO was higher than previously reported, while child hunger was comparable with literature.
- Emerging results suggested that parents would offer foods to their child first when there is limited food availability (Puddephatt et al., 2020).
- All in all, food insecurity remains as a widespread issue among those from low-income households during the MCO.

## RESULTS

Figure 1 : Sociodemographic characteristics of children.

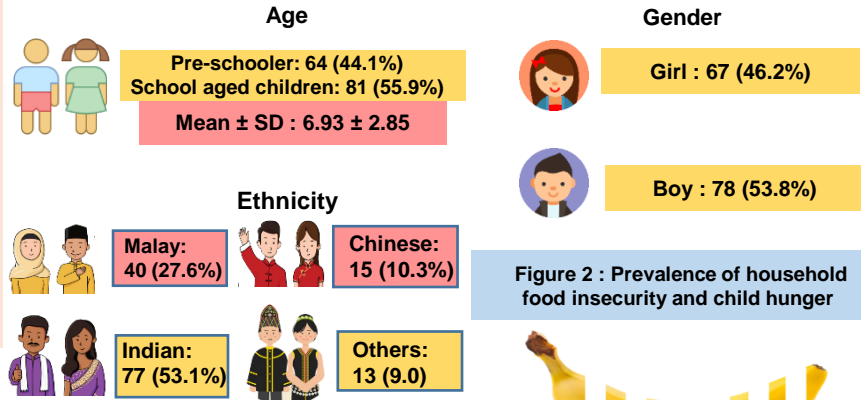


Table 1 : Mean score of children's eating behaviour.

Domain	Mean ± SD
<b>Food Approach</b>	
Enjoyment of food (EF)	3.77 ± 0.64
Emotional over-eating (EOE)	2.44 ± 0.76
Desire to drink (DD)	3.37 ± 0.74
Food responsiveness (FR)	3.10 ± 0.88
<b>Food Avoidance</b>	
Satiety responsiveness (SR)	2.88 ± 0.56
Food fussiness (FF)	2.95 ± 0.68
Emotional under-eating (EUE)	2.96 ± 0.69
Slowness in eating (SE)	2.69 ± 0.79

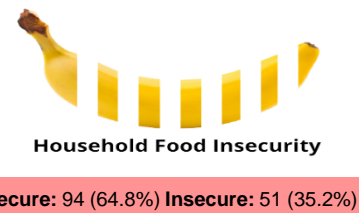
Table 2 : Point-biserial correlation between food security and eating behaviour.

Indicator	Food Approach	Food Avoidance
<b>Household food security</b>	0.333*	0.040
<b>Child hunger</b>	0.026	0.102

### Footnotes:

- Asterisk (\*) indicates significant correlation at  $p < 0.05$ .
- Different alphabet indicates significant difference within the same row at the level of  $p < 0.05$ .

Figure 2 : Prevalence of household food insecurity and child hunger



Child Hunger

Yes : 48 (29.6%) No : 97 (70.4%)

Figure 3 : Eating behaviour according to household food insecurity.

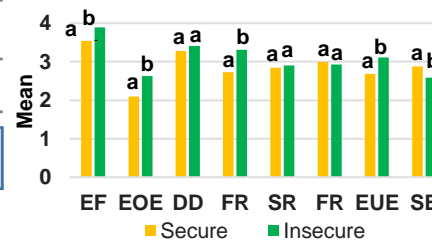
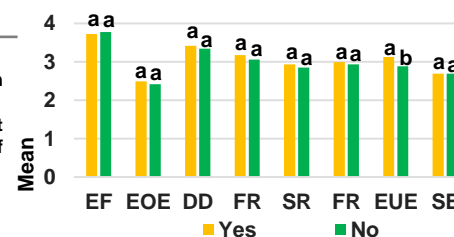


Figure 4 : Eating behaviour according to existence of child hunger



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