



An Examination on the Relationship Breakfast has with Mental Health through Adulthood

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Introduction

- Through longitudinal analysis, several studies have collected data showing correlations between a nutrient rich breakfast and decreased risks of depression. (Quirk, S.E. et al., 2013).
- Although breakfast is not a reflection of one's general diet, ongoing studies find that an absence of breakfast has a direct effect on low nutrients and vitamin intake.(Ferrer-Cascales, R. et al., 2011).
- Particularly, not having breakfast has been consistently implicated in the loss of key vitamins that help to lessen depressive symptoms (*Adan, R. A. H., et al* 2019)

Research Questions

- Is there an associated between non-breakfast eaters and depression?
- Does the positive association between depression and not eating breakfast differ for individuals based on how well they are able to handle personal problems?

Methods

Sample

- The sample from the first wave of the U.S. National Longitudinal Survey of Adolescent Health (ADD HEALTH) represents 20,850 adolescents who were in grades 7-12 during the 1994-95 school year, and have followed 5 waves into their adulthood.

Measures

- Neglecting breakfast was assessed with the question “In the past week, have you missed breakfast?” Possible responses ranged from 1 to 0 - where 1 indicated not eating breakfast.
- To measure depression symptoms, the main question that was focused on was “In general how is your mental health?” Where each response option ranged from 1-5 – where 1 indicated a poor mental health.
- Breakfast habits and non-breakfast eating were coded dichotomously.

Results

Bivariate Analysis

- A Pearson correlation test showed that **low mental health** was significantly and positively associated with **non-breakfast eating** ($r=0.32$, $p<0.001$).
- ANOVA analysis showed that there is a significant association between breakfast eaters and the ability to handle personal problems ($p=0.0025$).



Figure 1. a bar chart showing the general mental state of respondents vs. not eating breakfast

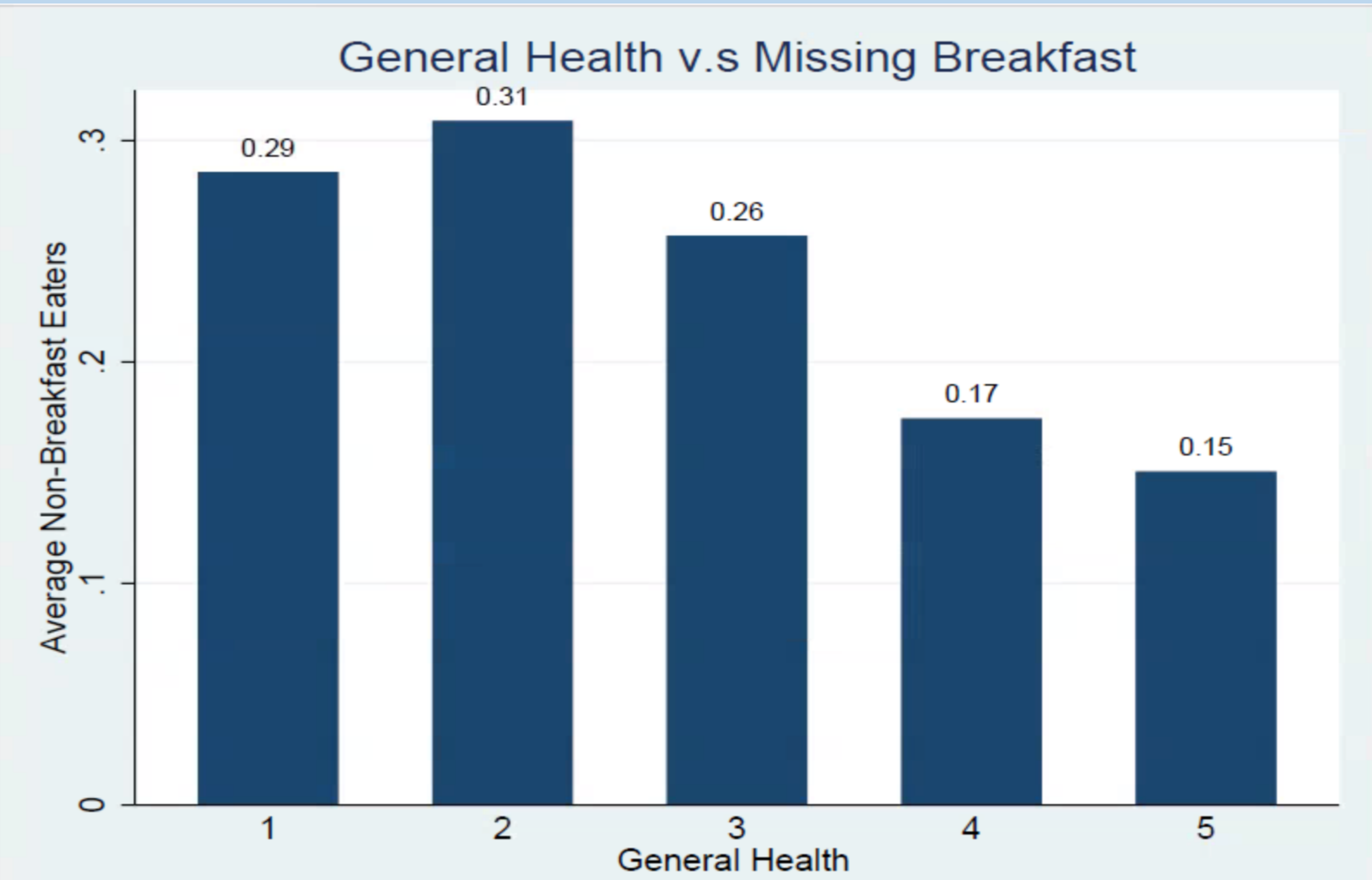


Figure 2. a table showing the odds ratio for non breakfast eaters – R squared = 0.0146

Non breakfast eating	Odds ratio	Standard Error	P-value
Poor mental health	1.376	0.0611	0.000
Not confident handling personal problems	0.971	0.0441	0.512
No control over important things	1.058	0.0432	0.166
_cons	0.117	0.0312	0.069

Multivariate

- The ability to handle personal problems is not a moderator for the association between poor mental health vs. non-breakfast eaters (Figure 2).
- Looking at the odds ratios for each level of these variables (2-5), mental health seems to only be significant when looking at groups 3 & 4 in comparison to group 1

Discussion

- Eating breakfast may affect individuals' mental health, however, more research would need to be done to solidify this association.
- Regardless of general mental health, individuals ability to handle personal problems does not seem to have a significant relationship to breakfast eating.
- Counselors and psychiatrists might use this information to gain a deeper understanding of the relationship food has with mental health.