

Psychosocial Work Environment and Oral Health in the English Longitudinal Study of Ageing (ELSA)

Esraa Aldalooj, George Tsakos PhD, Panayotes Demakakos PhD and Richard Watt PhD
University College London, Research Department of Epidemiology and Public Health, London, UK



Background

Psychosocial work environment make a significant contribution to the development of social inequalities in health¹. A growing body of literature shows that adverse psychosocial work environment is linked with a wide range of diseases and stress related disorders². However, evidence linking work environment with oral health outcomes is limited. With increasing proportion of older adults in the workforce, it is important to explore the role of psychosocial determinants as potential contributors to oral health in older populations.

Aim

To investigate the cross-sectional relationship between psychosocial work environment and oral health in the English Longitudinal Study of Ageing (ELSA)

Materials and Methods

Sample: 3,150 working participants from the third wave (2006-07) of ELSA

Exposures: Two psychosocial work environment measures:

- Work control
- Effort/reward imbalance

Outcomes: Three subjective oral health measures:

- The presence of natural teeth and/or dentures
- Self-rated oral health
- Oral Impacts on Daily Performances

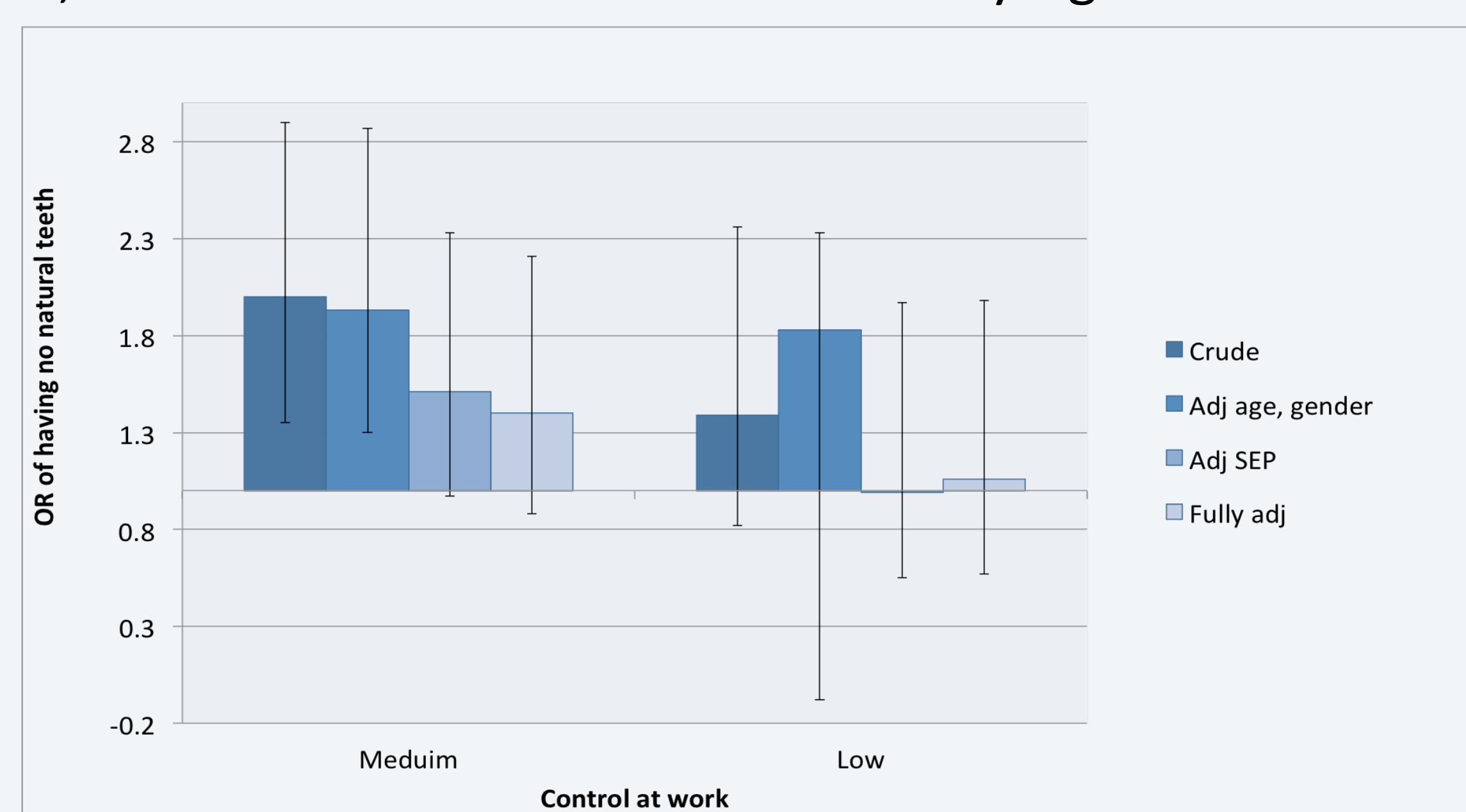
Covariates: Age, gender, marital status, educational level, occupational class, income, smoking status and alcohol consumption

Results

Odds ratios from logistic regression models for the association between control at work* and oral health:

Higher odds of having no natural teeth in participants with medium and low work control compared to those with high work control.

However, these associations were not statically significant.



Odds ratio of having no natural teeth

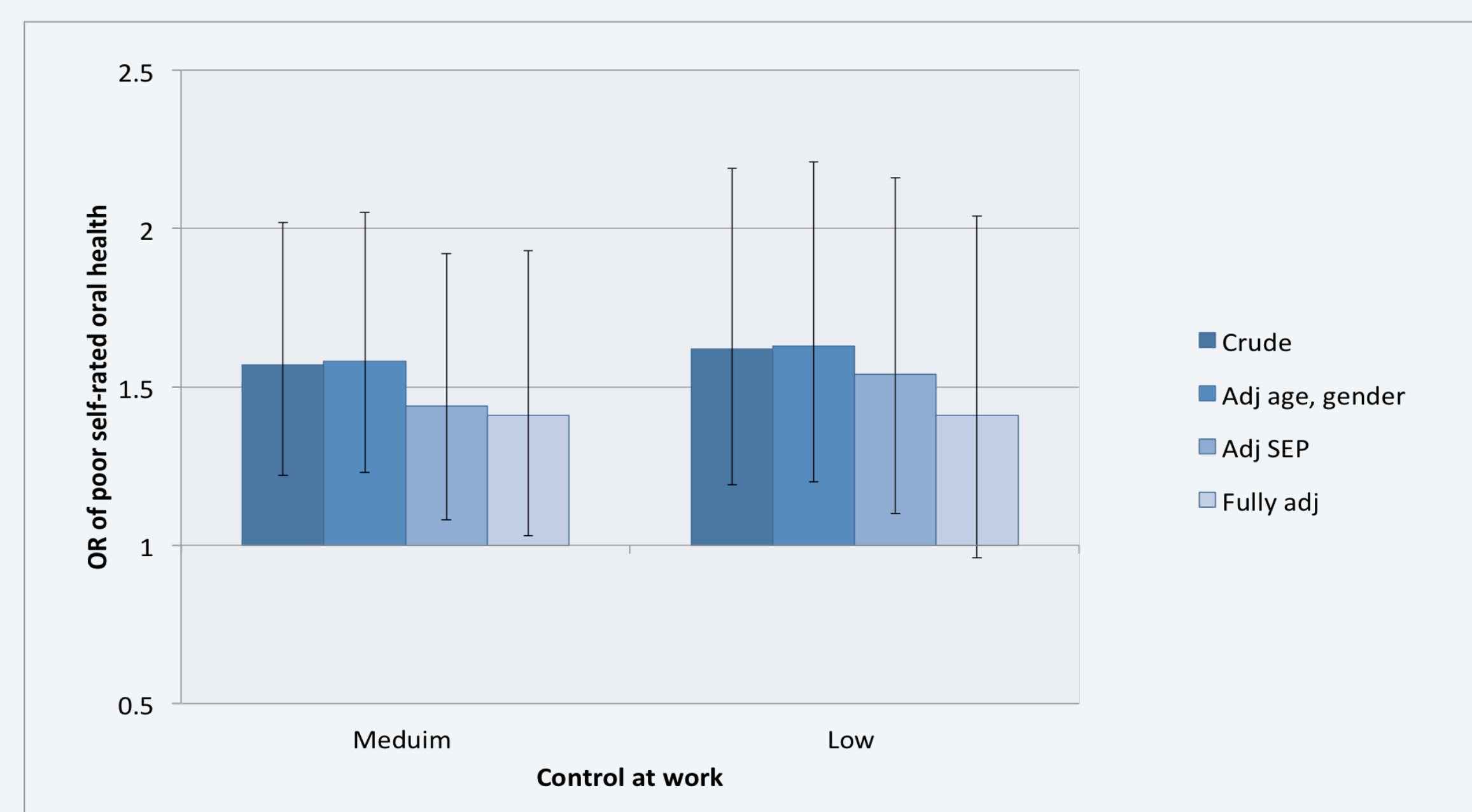
Results – cont.

Higher odds of reporting poor oral health in workers with medium control at work compared to workers with high control at work.

This association was statistically significant after adjusting for all covariates.

Additionally, **workers with low control at work have higher odds of reporting poor oral health compared to those with high control at work.**

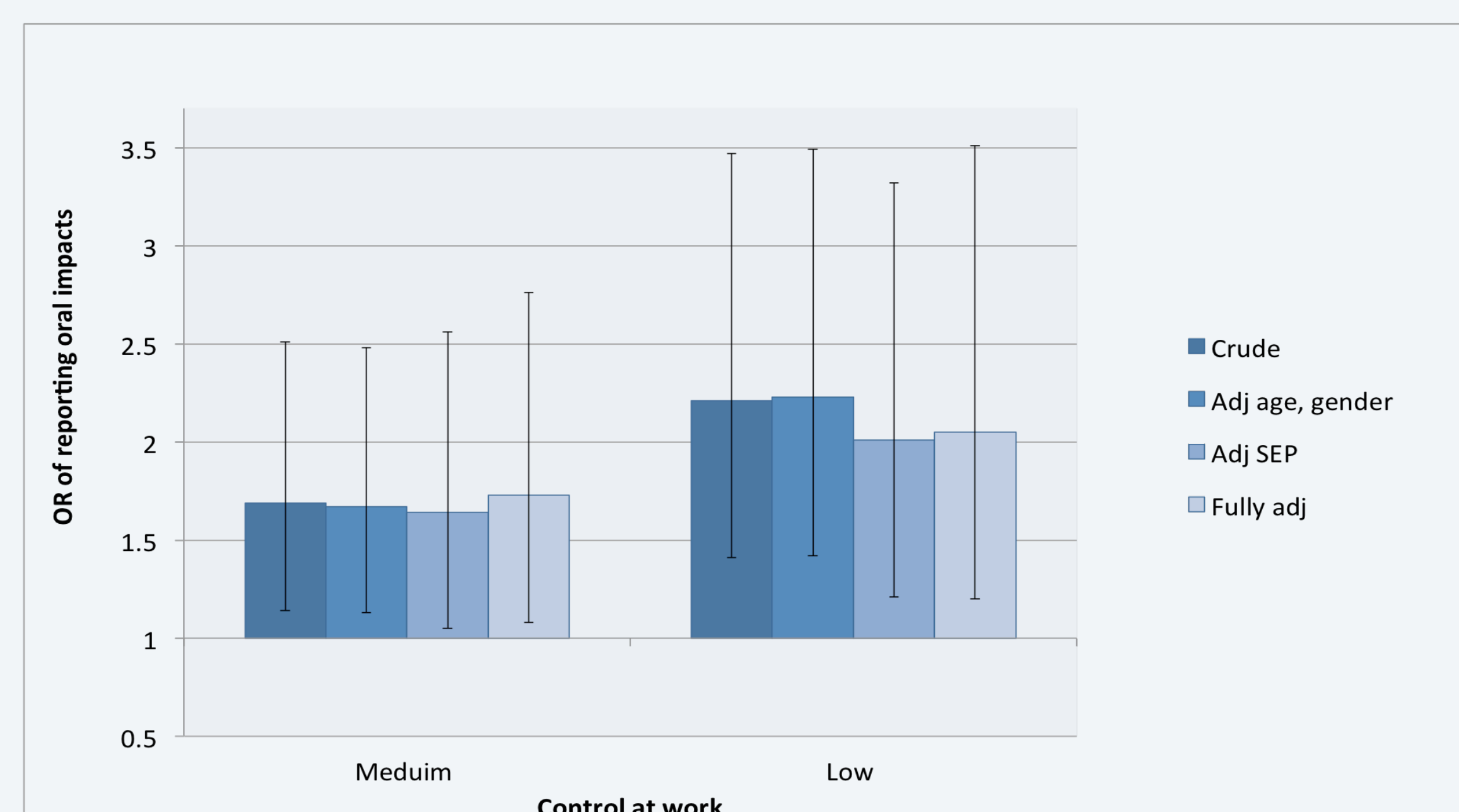
However, this association was explained by health-related behaviours.



Odds ratio of reporting poor oral health

Workers with both medium and low control at work have higher odds of reporting oral impacts on daily performances compared to others with high work control.

Associations were statistically significant after adjusting for all covariates.



Odds ratio of reporting oral impacts on daily performances

* Similar associations found between effort-reward imbalance and all three oral health outcomes.

Conclusion

The findings suggested that older workers who had poor work control were more likely to report poor oral health and oral impacts on daily performances. This association seems to be independent from socioeconomic characteristics.

However, there was no significant association between psychosocial work environment variables and edentulousness. This might be because edentulousness is a crude measure that is determined by disease levels and patterns of dental care throughout the life course.

References: ¹ Siegrist, J. et al., 2009. Employment arrangements, work conditions and health inequalities. Report on new evidence on health inequality reduction, produced by Task group, 2 for the Strategic review of health inequalities post 2010.

² Nieuwenhuijsen, K., Bruinvels, D. & Frings-Dresen, M., 2010. Psychosocial work environment and stress-related disorders, a systematic review. *Occup Med*, 60, pp.277 – 286.