

# Reading and writing difficulties' association with self-rated health among Danish adolescents

## - A cross-sectional study based on the FOCA cohort

### Authors

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### Background

People struggling with reading and writing difficulties may have poor odds of achieving a good and healthy life.

Reading and writing difficulties are independent risk factors for not completing education and unemployment, which are essential in order to obtain a good and healthy life.

Therefore, the purpose of this study was to investigate the association between reading and writing difficulties and self-rated health among adolescents, and to investigate how mental health affects the association.

### Methods

A cross-sectional study was performed based on the FOCA cohort, a Danish population-based survey among 9th grade pupils, mainly aged 15- and 16-years old, gathered during the first months of 2017. The study population contained 9,748 pupils.

The dependent variable was a yes-or-no answer to experiencing limitations in every-day life due to reading and writing difficulties.

The independent variable was measured with the SF-36 self-rated health question, dichotomised in high (very good, excellent) and low (good, fair, poor). A logistic regression model was applied.

### Results

Among the study population 953 (9.8%) pupils reported having reading and writing difficulties.

The adjusted OR of having a high self-rated health was significantly lower among adolescents with reading and writing difficulties than without (0.73 (95% CI: 0.60-0.87)).

Loneliness and perceived stress, explained a minor part of the association, OR attenuated from 0.56 (95% CI: 0.48-0.66) in the crude model to 0.68 (95% CI: 0.57-0.81) in a more adjusted model.

### Conclusion

Adolescents with reading and writing difficulties are not only struggling with reading and writing difficulties but experiencing also low self-rated health.

Mental health only explained a minor part of this association.

To clarify whether causal relationship between reading and writing difficulties and self-rated health may exist, longitudinal studies are needed.

If support for the hypothesised causality is found early identification of reading and writing difficulties is important, to prevent future health inequality in adolescents with reading and writing difficulties.

