



The prevalence of internalizing disorders, symptoms, and neuroticism across age and sex

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NSA Symposium, 24 Sept 2021



Epidemiology of internalizing disorders - open questions:

1. Prevalence of internalizing disorders decreases across age, but how exactly?
2. Women report more internalizing disorders than men ($\sim 1.7x$), but is this true over the entire life-span?
3. Are there differences in development across age for internalizing disorders, symptoms, and neuroticism?



Methods

146,315 Lifelines participants aged 18-80 years

Cross-sectional data (one time point)

Current internalizing disorders (MINI)

Negative affect (PANAS)

Neuroticism (NEO)

Generalized additive models





Results 1: Development across age

Sex and age weighted point prevalence:

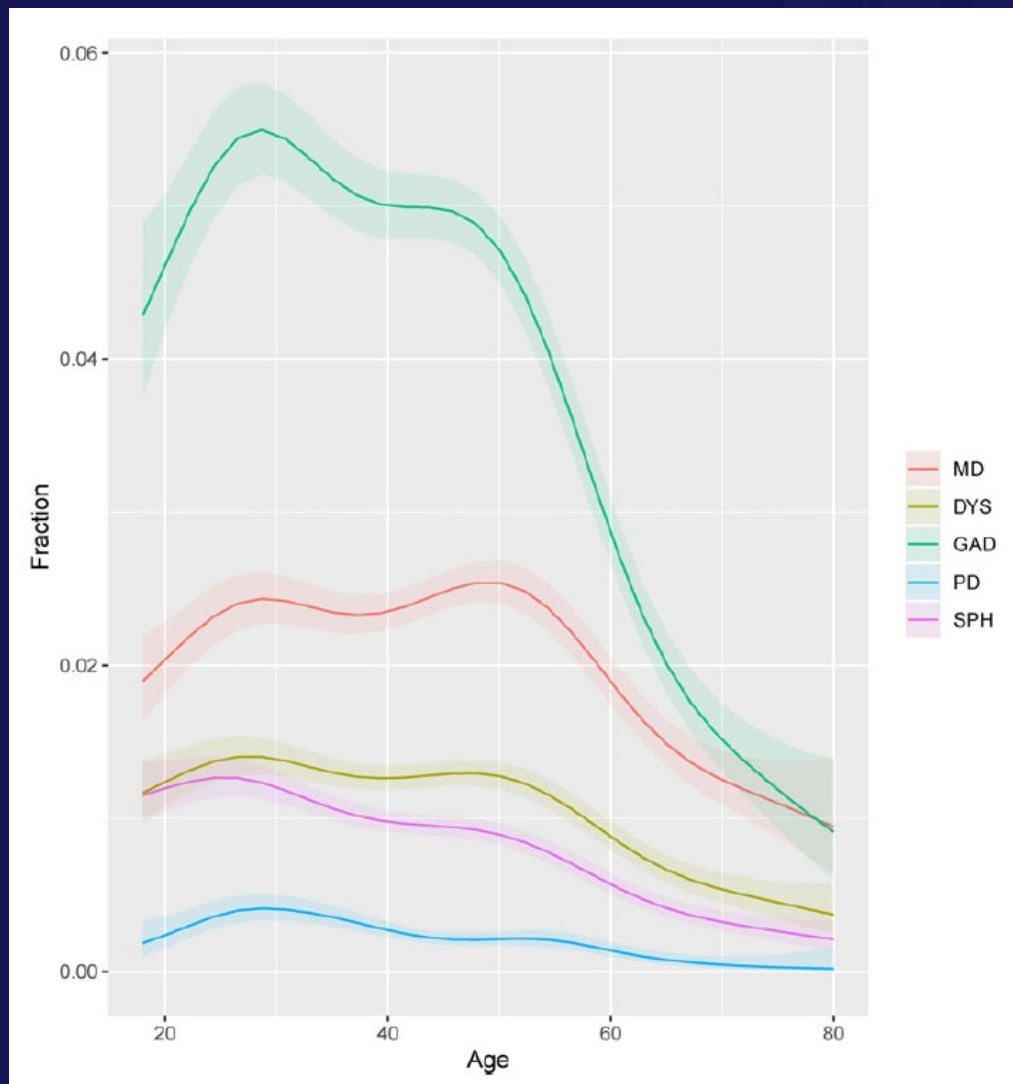
GAD: 3.7%

MD: 2.0%

DYS: 1.0%

SPH: 0.8%

PD: 0.2%

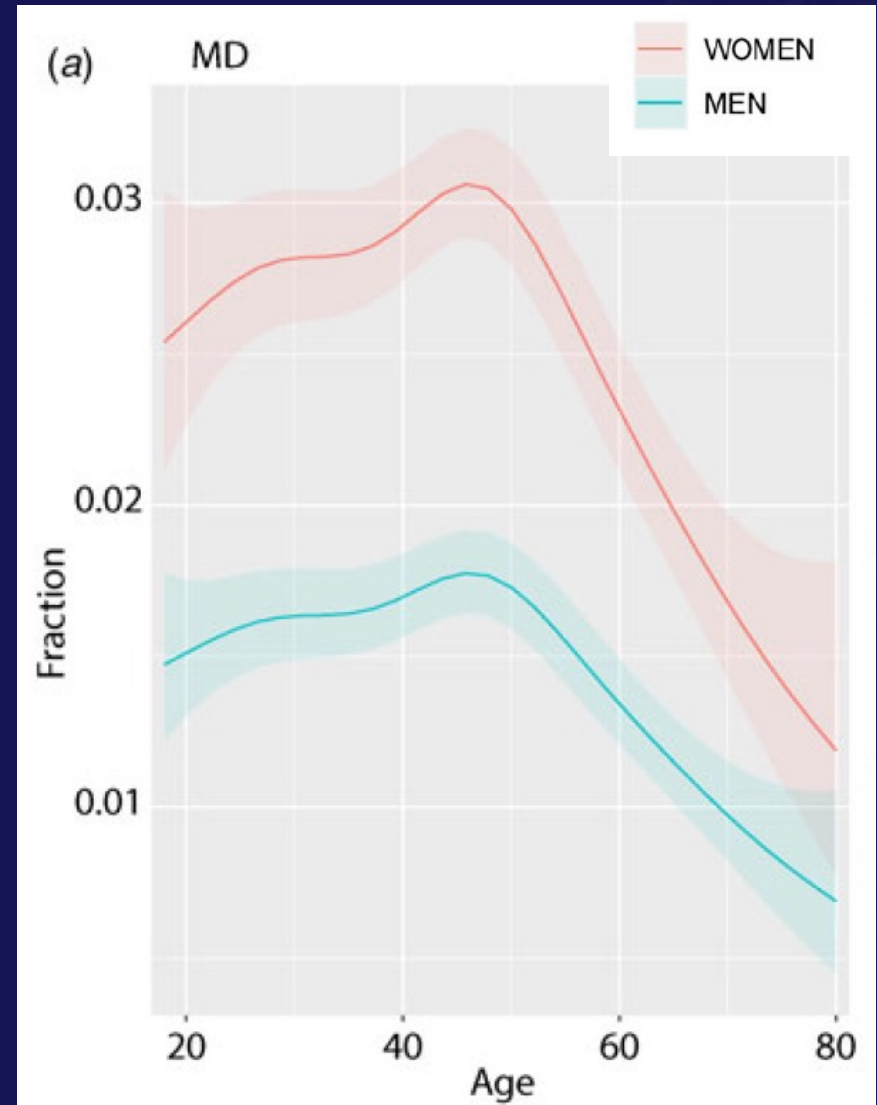




Results 2: Gender gap across age

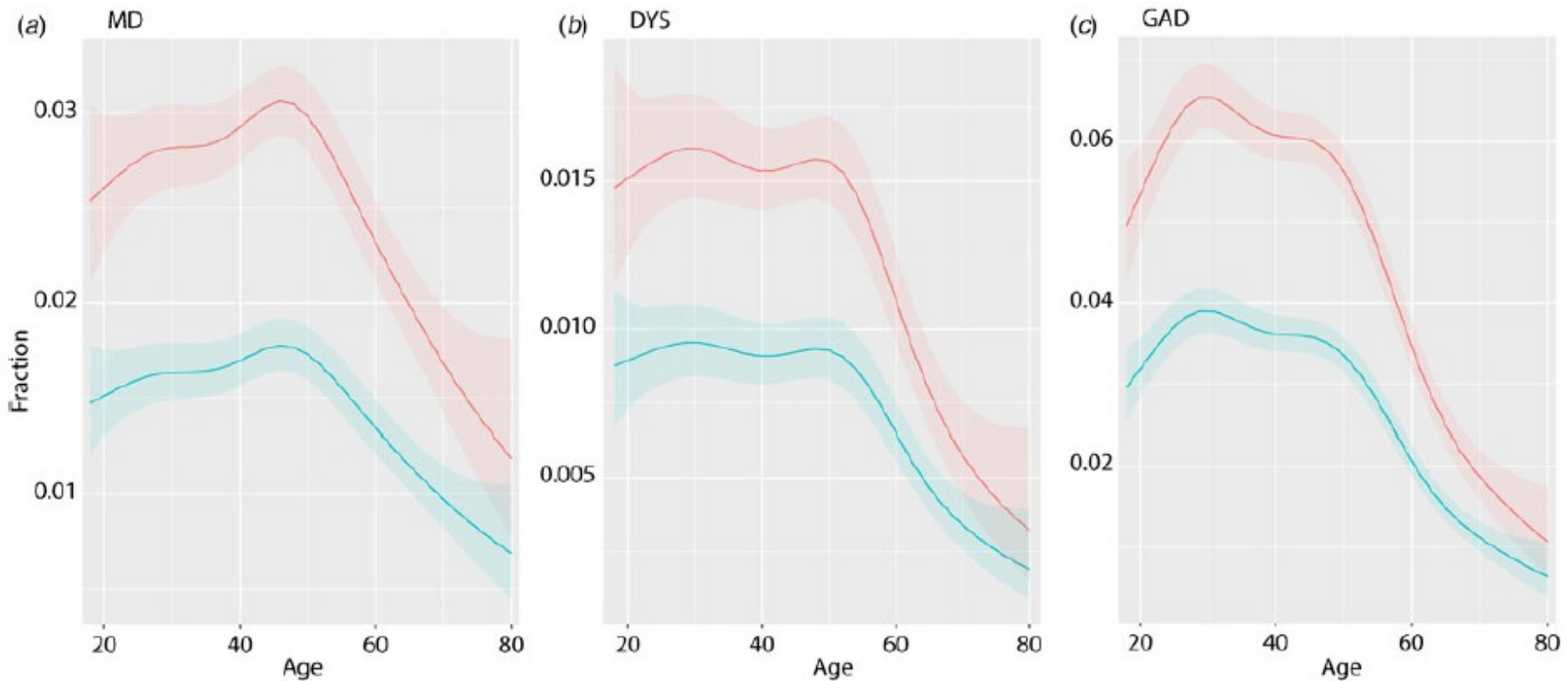
Relative risk remains remarkably similar (~ 1.7)

Perimenopausal effect not visible



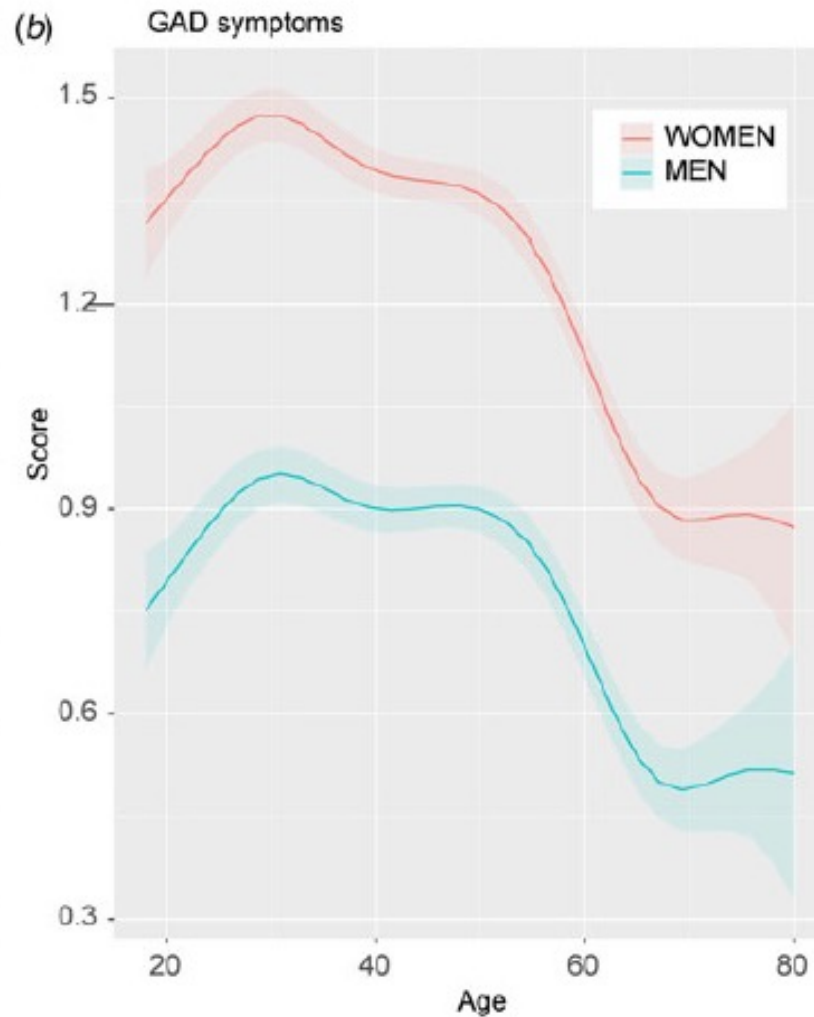
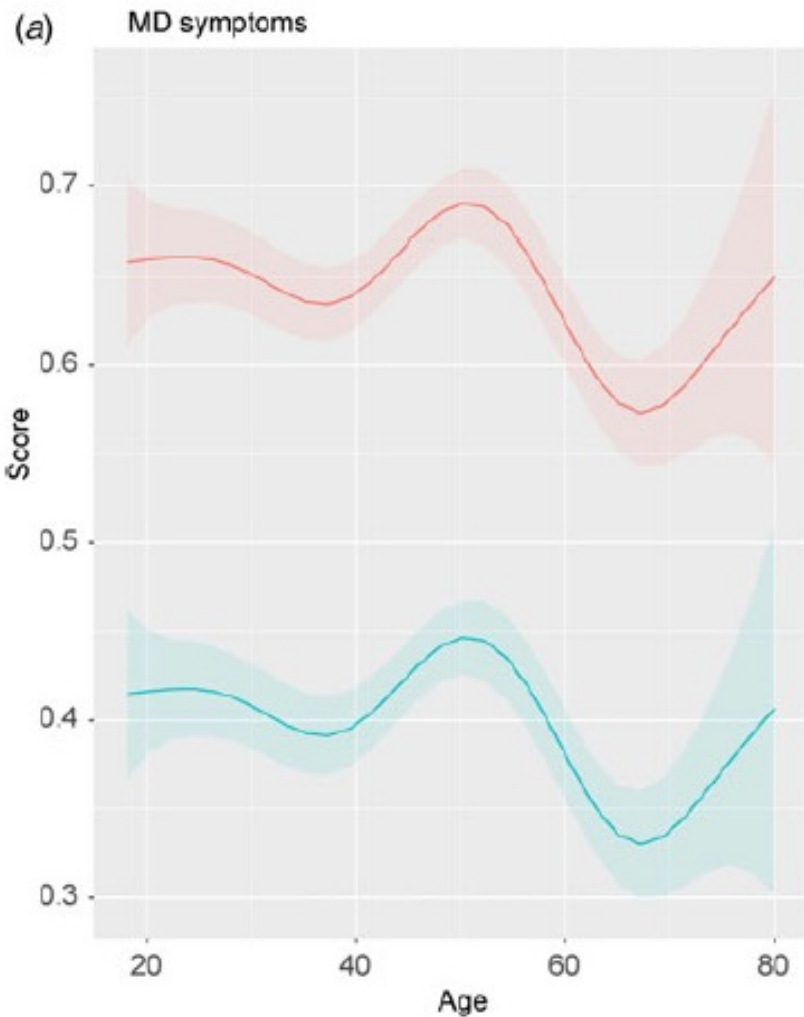


Also a constant gender gap in the other internalizing disorders



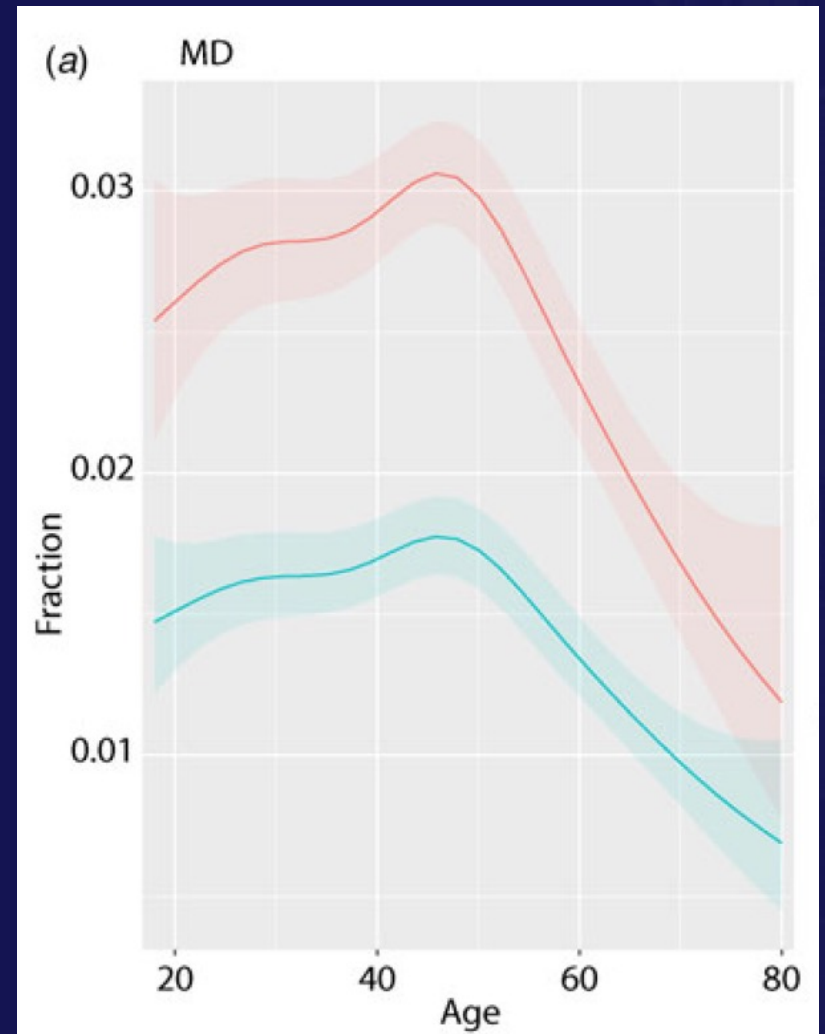
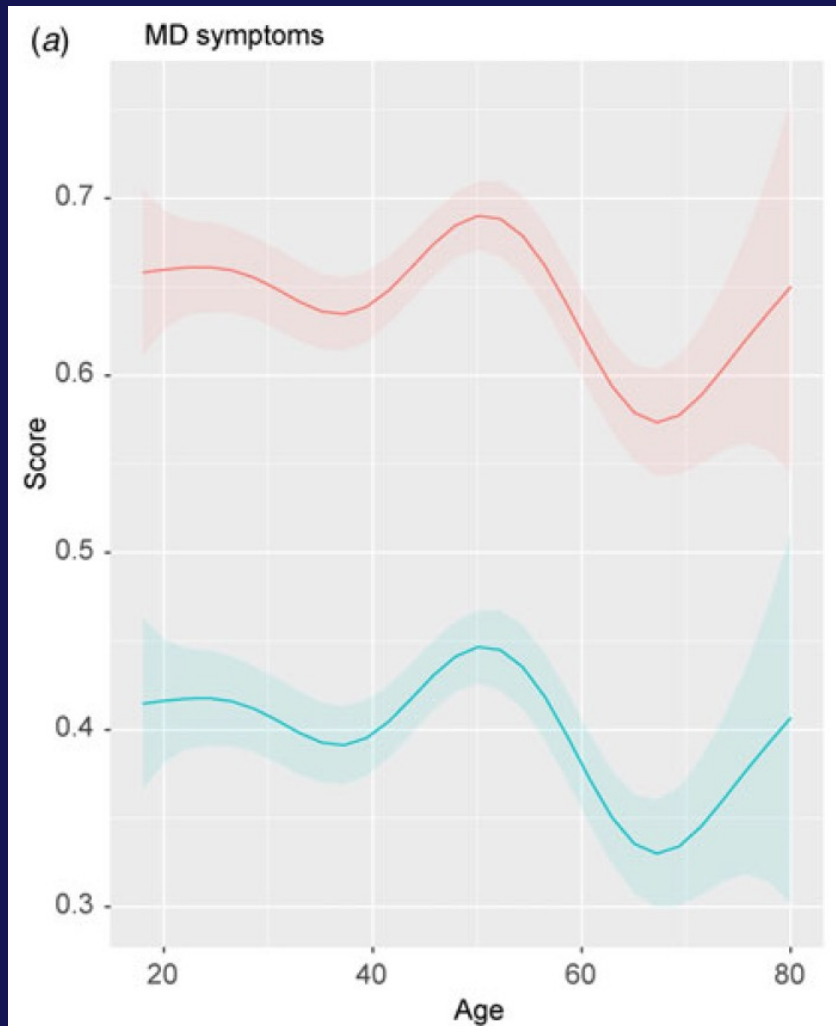


Results 3. Depressive and anxiety symptoms show a different pattern



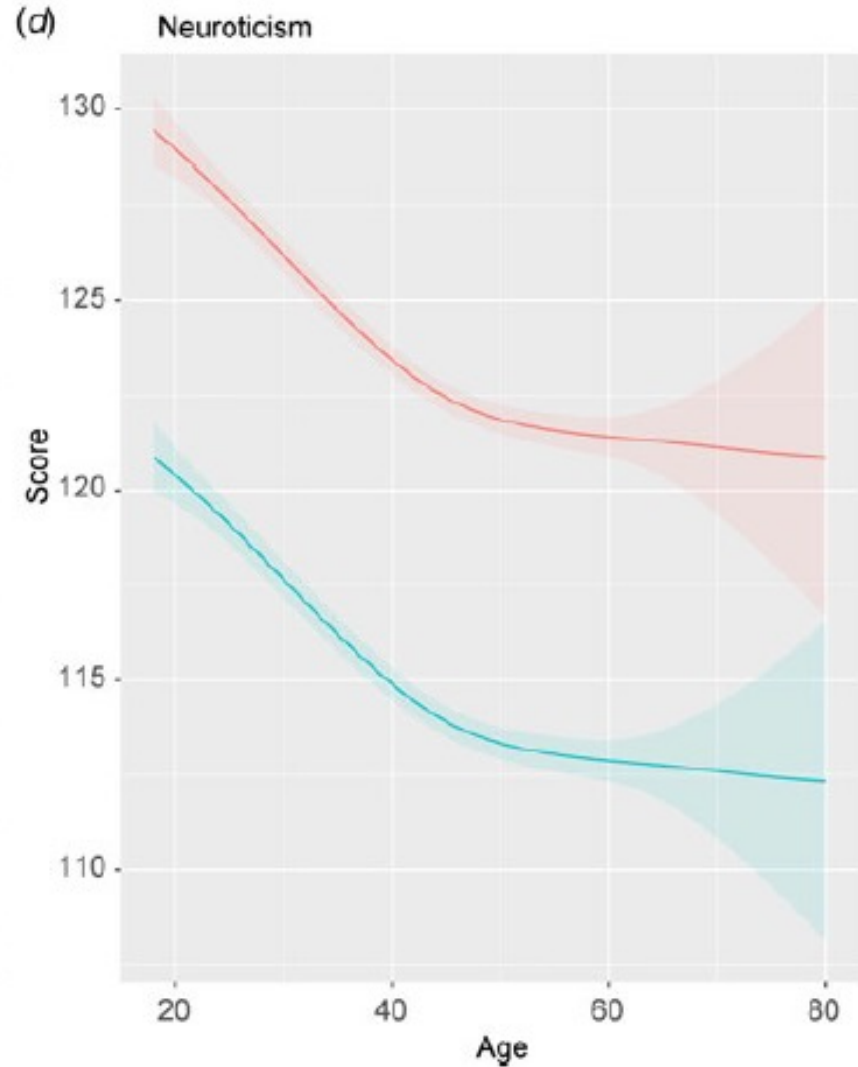
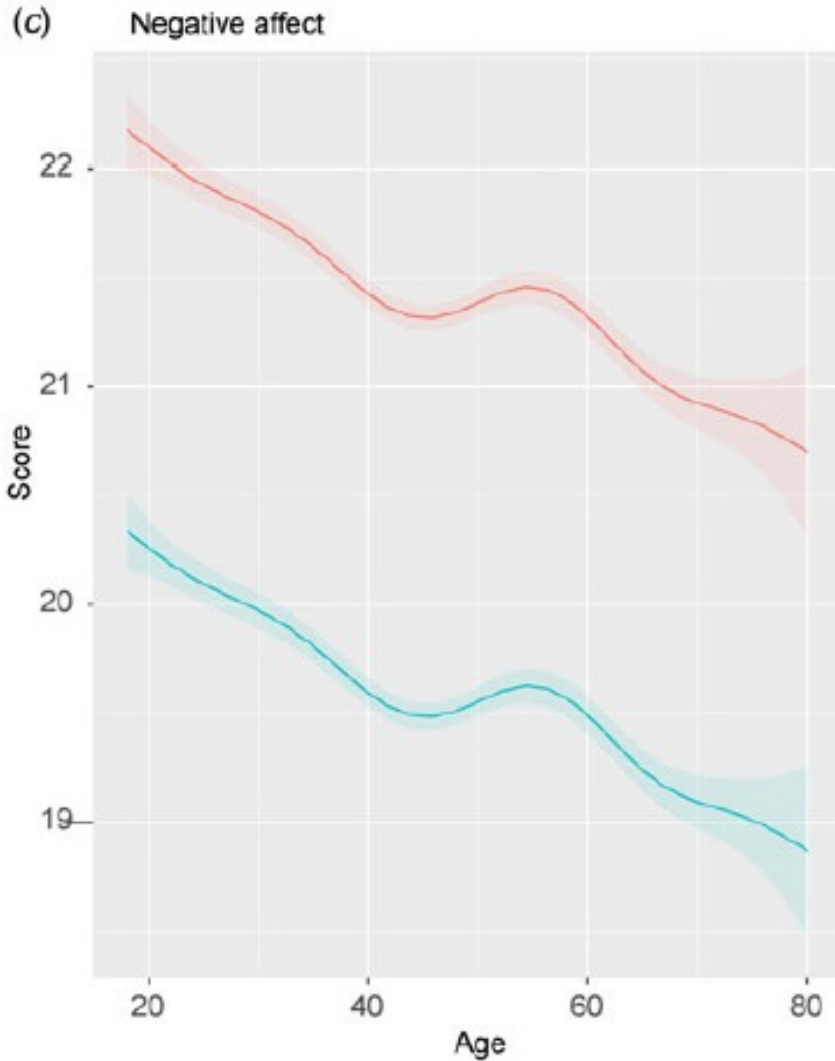


Depressive symptoms vs major depression:





Negative affect and neuroticism – the older the better?





Conclusions

1. Point prevalence of internalizing disorders highest between age 30-50 years
2. Relative risk (prevalence women/prevalence men):
 - ~ 1.7 for MD, GAD, PD and DYS;
 - ~ 1.2 for SPHdoes not change across age
3. Depressive and anxiety symptoms, negative affect and neuroticism show a different pattern across age



Future studies


- Age – period – cohort effects?
- Why do we see changing prevalence rates across age?
- Why sex differences?
- Relation between neuroticism – depression across age



Thank you!

Questions or remarks: h.van.loo@umcg.nl

Prevalence of internalizing disorders, symptoms, and traits across age using advanced nonlinear models

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Psychological Medicine 2021, doi 10.1017/S0033291721001148