



Latent classes of PTSD, adjustment disorder, and wellbeing during the COVID-19 pandemic

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Impact of pandemic on mental health

Molecular Psychiatry
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ARTICLE



Prevalence of posttraumatic stress disorder after infectious disease pandemics in the twenty-first century, including COVID-19: a meta-analysis and systematic review

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Pooled prevalence rate of post-pandemic PTSD of 23%

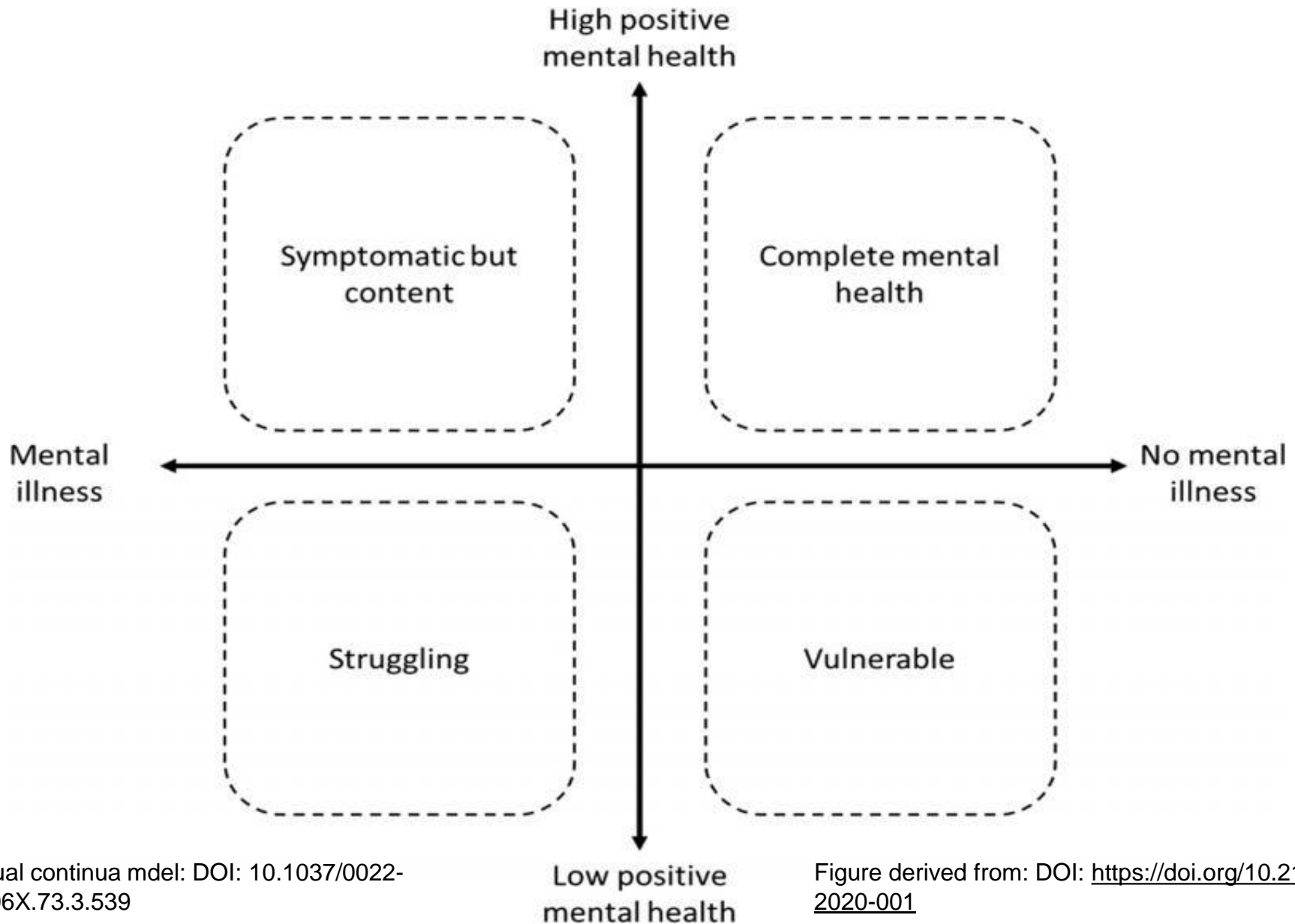
16-49% AD prevalence rates reported during COVID-19 pandemic



<https://doi.org/10.1192/bjo.2020.158>

<https://doi.org/10.1080/20008198.2020.1860356>

Dual continua model of mental health (Keyes)



Latent class analysis



Participants (N = 14505)

Online survey data collected between June and November 2020



Inclusion criteria: resident in one of these countries and ≥ 18 years



Italy



Germany



Portugal



Sweden



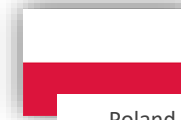
Netherlands



Georgia



Austria



Poland



Croatia



Lithuania



Cyprus/Greece

Analytic steps

1 up to 12 class models were run based on dichotomized indicators

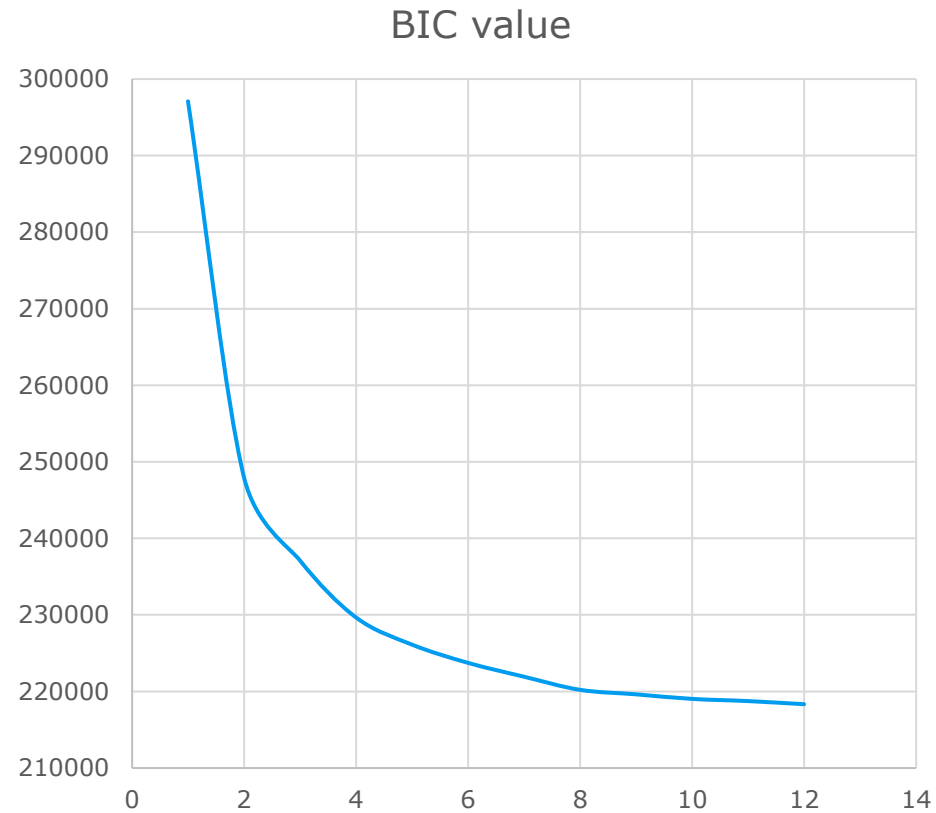
Optimal model fit was based on:

- Reductions in BIC values
- Interpretation of classes
- Replication of findings in smaller sample

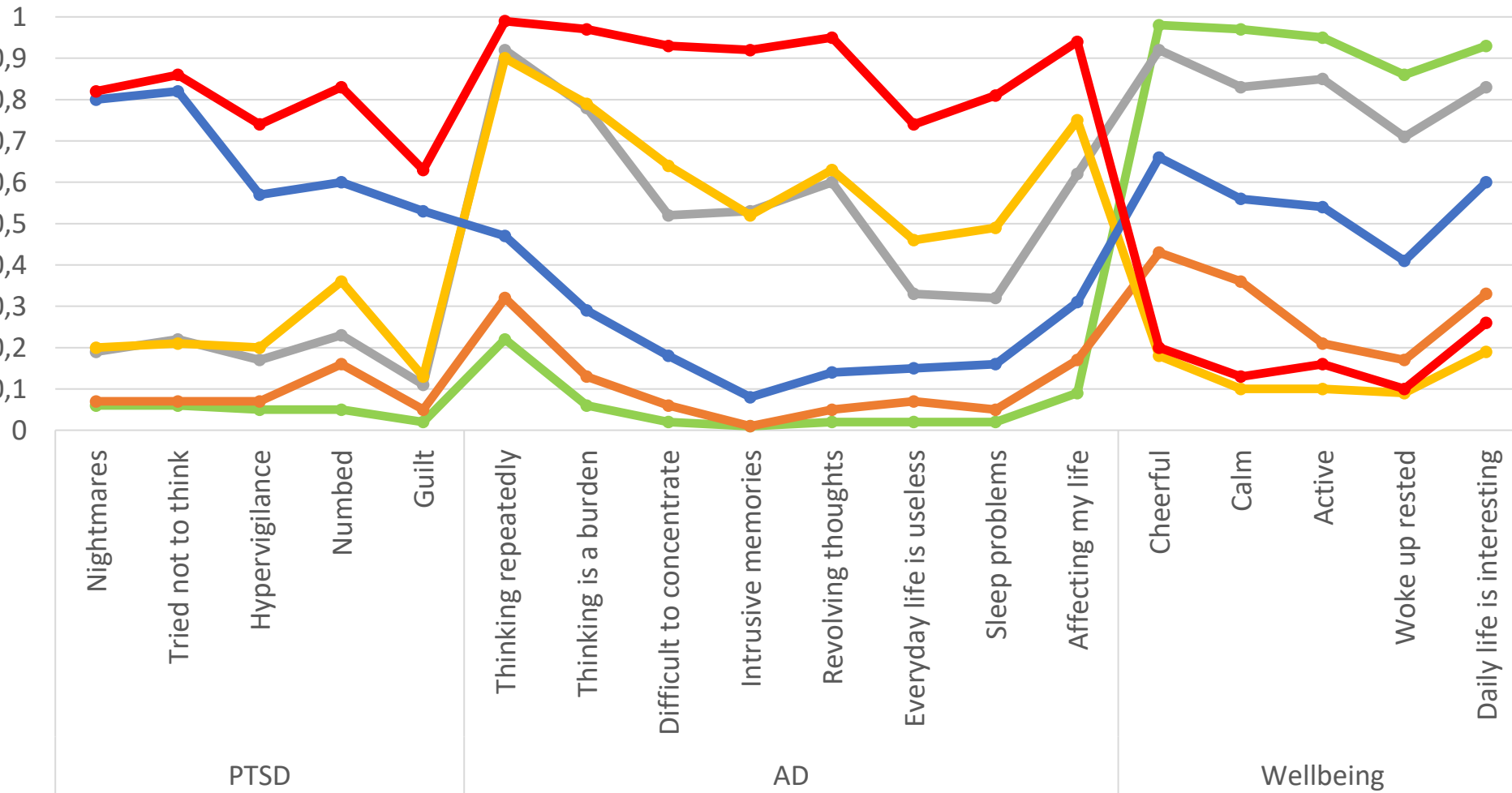
Examination of correlates of class-membership with multinomial log. regression



Reductions in BIC for 1-12 class solutions



6-class solution



—●— Class 1; No PTSD/No AD/High wellbeing (36%)
—●— Class 3; Moderate PTSD/Moderate AD/High wellbeing (14%)
—●— Class 5; High PTSD/Moderate AD/Moderate Wellbeing (11%)

—●— Class 2; Low PTSD/Low AD/Moderate wellbeing (17%)
—●— Class 4; Moderate PTSD/High AD/Low wellbeing (12%)
—●— Class 6; High PTSD/High AD/Moderate wellbeing (9%)

Correlates of class-membership

Correlate	Total N = 14505	Class 1 No PTSD/No AD/High wellbeing	Class 2 Low PTSD/Lo w AD/Moder ate wellbeing	Class 3 Moderate PTSD/Mo derate AD/High wellbeing	Class 4 Moderate PTSD/Hig h AD/Low wellbeing	Class 5 High PTSD/Mo derate AD/Moder ate Wellbeing	Class 6 High PTSD/Hig h AD/Moder ate wellbeing
Male gender, %	32	36	36	26	27	23	20
Universi ty, %	68	61	64	74	73	77	80
Age, M	43	45	42	44	42	39	41
Adverse Childho od Experie nces, M (0-9)	1.3	0.8	1.0	1.1	1.2	2.0	2.6

Correlates of class-membership

Correlate	Total N = 1450 5	Class 1 No PTSD/No AD/High wellbeing	Class 2 Low PTSD/Lo w AD/Moder ate wellbeing	Class 3 Moderate PTSD/Mo derate AD/High wellbeing	Class 4 Moderate PTSD/Hig h AD/Low wellbeing	Class 5 High PTSD/Mo derate AD/Moder ate Wellbeing	Class 6 High PTSD/Hig h AD/Moder ate wellbeing
Restr. Physical social contact (0- 3)	1.4	1.1	1.3	1.7	1.8	1.5	2.0
Work- related problems (0-3)	0.6	0.4	0.5	0.8	0.9	0.7	1.1
Fear of infection (0-3)	0.6	0.5	0.5	0.7	0.7	0.6	0.9
Restricted activity (0- 3)	1.5	1.2	1.4	1.7	1.8	1.6	2.0

Summary...

- Individual differences in mental health outcomes during the pandemic were observed in over 10,000 people across 11 European countries
- Classes were observed with elevated symptoms while maintaining wellbeing (14%) as well as classes with low wellbeing without complaints (17%). This offers support for dual continua model of mental health.
- “Complete” mental health was the most common response (1/3 of sample)
- One out of ten people reported elevated symptoms and poor wellbeing
- Risk factors for poorer mental health were: female gender, greater exposure to ACE, increased burden of restrictions in physical social contact, work-related problems, and restrictions in activity

To conclude

- Focusing on mental illnesses and positive mental health yield a more complete picture of overall mental health, however we only focused on PTSD and AD symptoms.
- Risk factors of mental health were identified which offers tools for screening, prevention, and treatment of enhancing mental health.
- Future research directions: examination of stability of classes over time and transitioning between classes



Thank you for your attention

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