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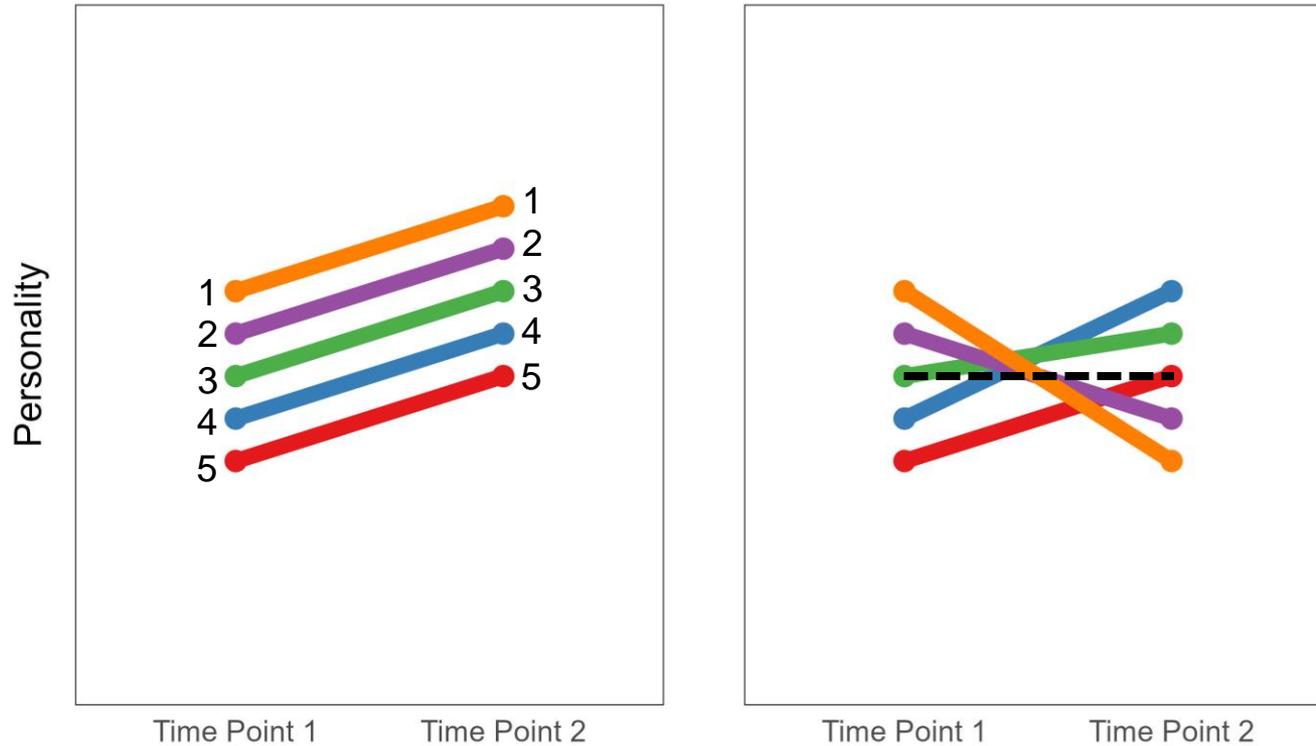
# The Development of the Rank-Order Stability of the Big Five Across the Life Span

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## RANK-ORDER STABILITY



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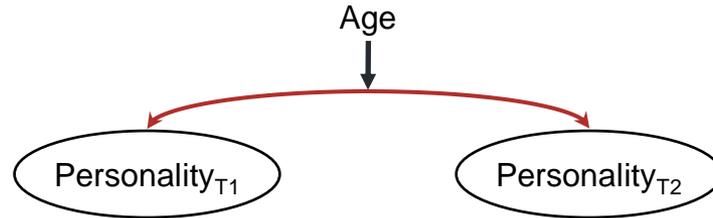


- Computed as (latent) correlation across measurements



- Decreases with length of retest interval (e.g., Conley, 1984)
  - Approaching a nonzero asymptote (Anusic & Schimmack, 2016; Fraley & Roberts, 2005)

## RANK-ORDER STABILITY AND AGE



- Strong evidence for increasing stability until midlife (e.g., Ferguson, 2010; Roberts & DelVecchio, 2000)
- Development after midlife uncertain
  - Plateau (e.g., Roberts & DelVecchio, 2000)
  - Decrease (Lucas & Donnellan, 2011; Specht et al., 2011; Wortman et al., 2012)

## RANK-ORDER STABILITY AND AGE

- Decrease found in age-representative samples (e.g., SOEP and HILDA)
  - Two waves of data
- With *same* samples less support for decline (Wagner et al., 2019)
  - Three waves of data
  - Only individuals with complete data over 8 years: Overly healthy sample?
  - Changes in health go along with changes in personality (e.g., Mueller et al., 2018)
  - Stability estimates biased upward in older age in the selective sample?

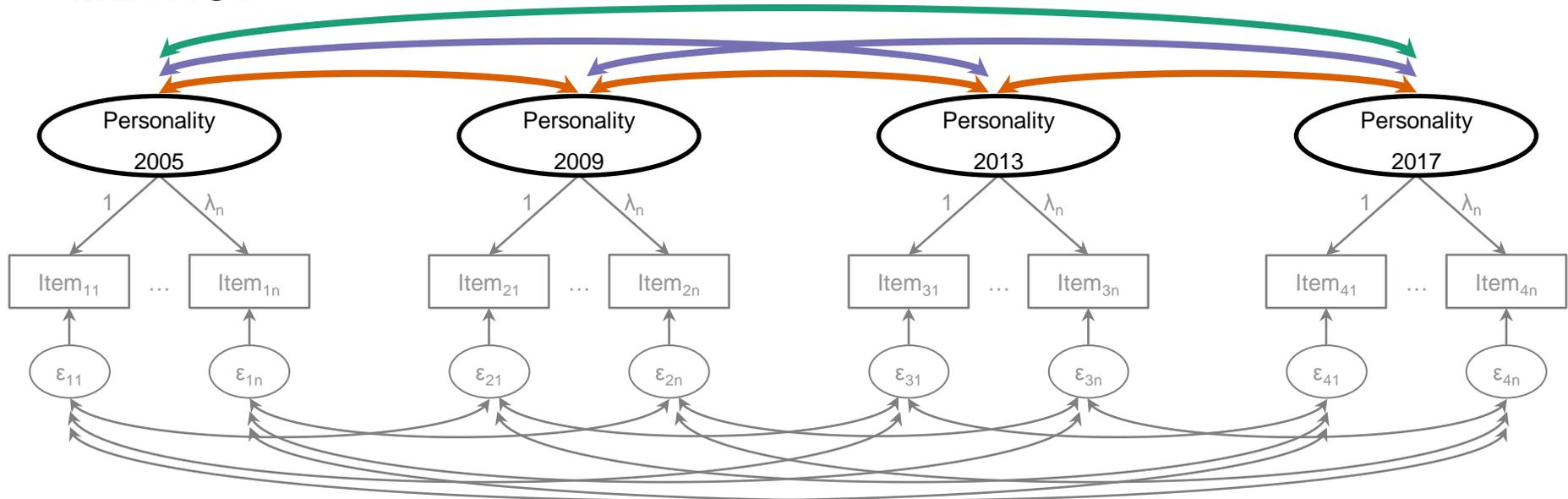
## THE PRESENT RESEARCH

- Decline in stability if incomplete cases included?
- No decline in healthy sample?

## METHOD

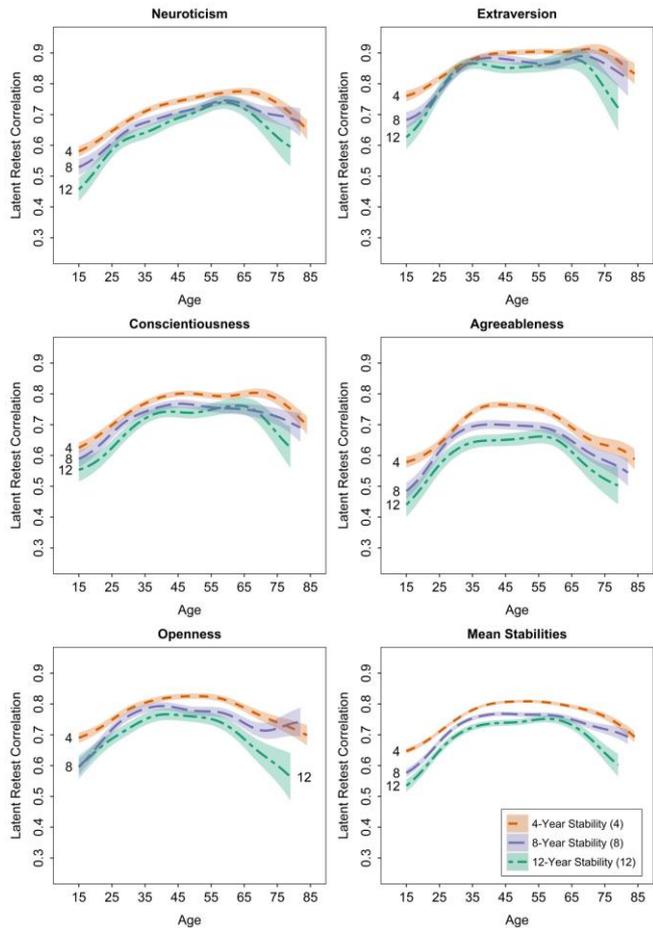
- Panel data
  - Germany: Socio-Economic Panel (SOEP)
  - Australia: Household, Income and Labour Dynamics in Australia (HILDA)
- Personality: Big Five
  - SOEP: 3 items per trait
  - HILDA: 4–6 items per trait
  - Measured in 2005, 2009, 2013, and 2017
- Inclusion:  $\geq 2$  waves of personality data

## METHOD

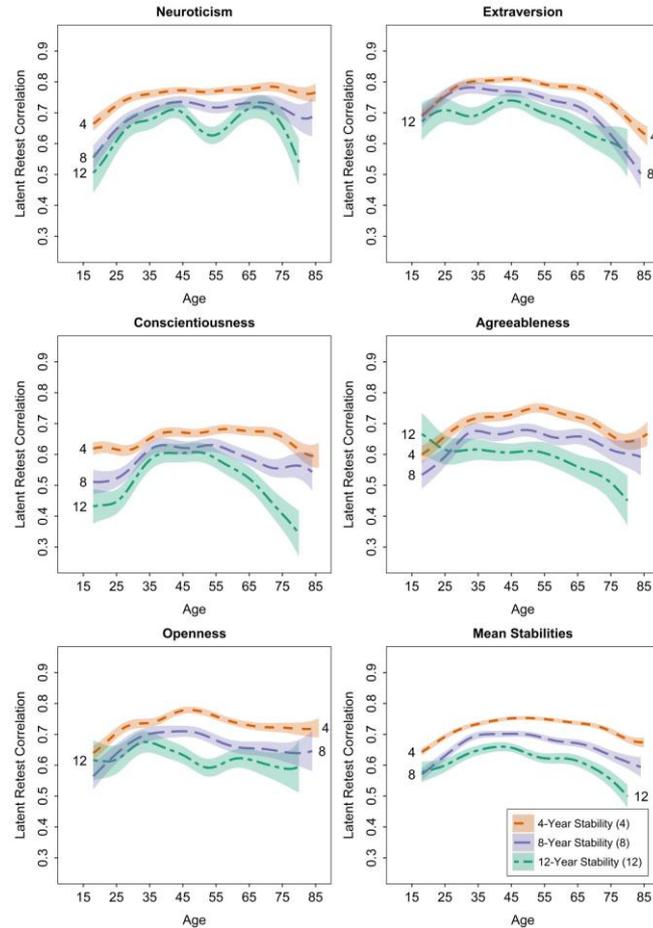


- Continuous age effects on latent stability (local structural equation modeling; Hildebrandt et al., 2016)
- Missing data handled with FIML estimation

# HILDA (N = 15,465)



# SOEP (N = 21,777)

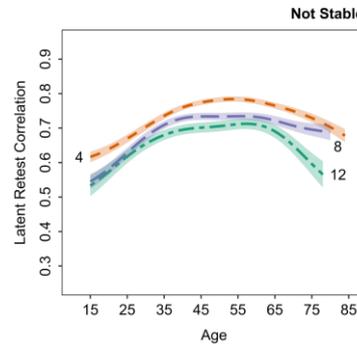
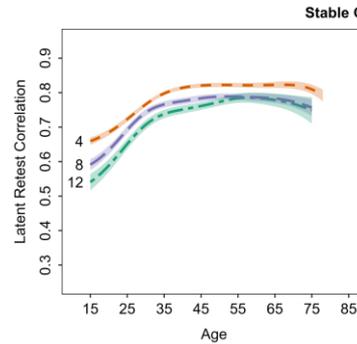


## DEVELOPMENT OF RANK-ORDER STABILITY AND HEALTH

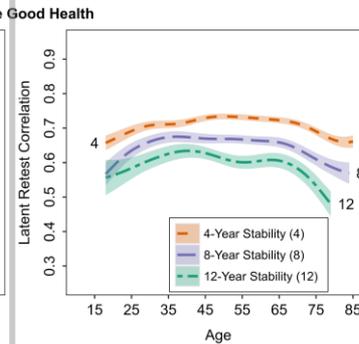
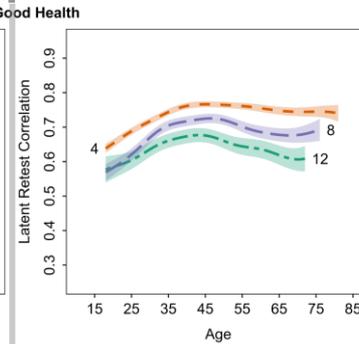
- Self-reported health measured yearly between 2005 and 2017
- Samples split
  - Stable good health (HILDA:  $n = 9,191$ ; SOEP:  $n = 11,237$ )
  - Not stable good health (HILDA:  $n = 6,274$ ; SOEP:  $n = 10,540$ )

## DEVELOPMENT OF RANK-ORDER STABILITY AND HEALTH

HILDA



SOEP



## CONCLUSION

- Inverted U-shaped developmental pattern in rank-order stability across life span
- Decline explained by health-related changes
- Implicitly condition on health (e.g., excluding participants with missing data on later waves): Decline in personality stability underestimated or missed



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# THANK YOU!

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