

# Mental Health in Academia

Problems, Solutions and Perspectives

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# Facts about Mental Health Disorders

- $\pm$  1/3 people suffer from a mental health disorder at some point in their life

- Differences between countries:

Diagnosis only!

Only 8-14% seek treatment in developed countries

Taboo?

- High disease burden:

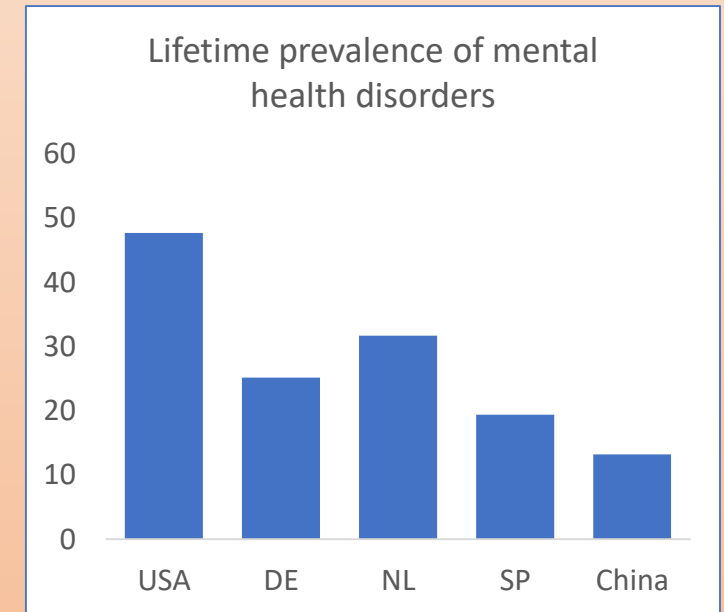
- Early age of onset (adolescence or early adulthood)

- Often chronic

- 28.5% of years lived with disability caused by mental, neurological and substance abuse disorders

- Depression leading cause of disability in high-income countries

- High costs: € 418 billion in Europe (2010: direct + indirect costs)

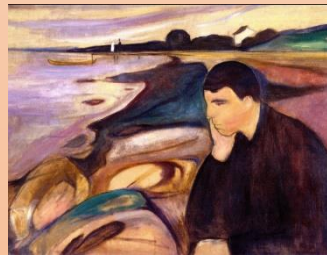


# Types of Mental Health Disorders

- Anxiety disorders
  - Specific phobias
  - Social anxiety disorder
  - Panic disorder



- Mood disorders
  - Depression
  - Bipolar disorder



- Schizophrenia



- Impulse control disorders
  - ADHD
- Autism spectrum disorders



- Substance abuse disorders
  - Alcoholism
  - Drug abuse



- Eating disorders
- Etc.



# Causes for Mental Health Issues

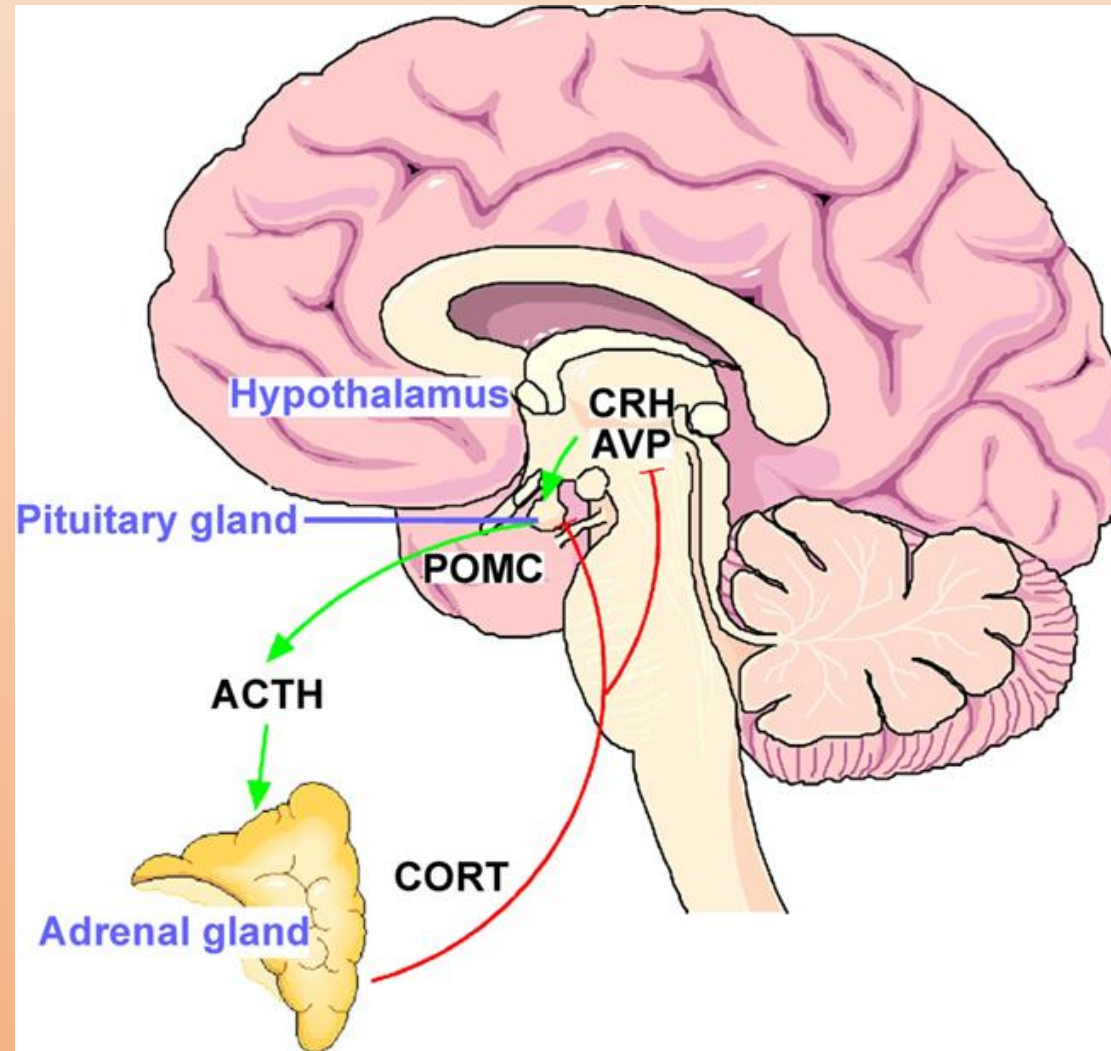
- Genetically determined risk:
  - Schizophrenia, bipolar disorder, autism: 60-80%
  - Depression:  $\pm$  37%
  - Anxiety disorders: 30-67%



- Environmental factors:
  - **Stressful life events**
  - Prenatal stress
  - Childhood trauma
  - Parenting style
  - Physical conditions
  - Drug (ab)use
  - Social-economic status
  - Urbanicity
  - **Social environment / support**



# HPA-axis: the Link between Stress and the Brain



# Examples of Stressors

- Physical health
  - Medical conditions
  - Diet
  - Sleep / rest
- Cognition
  - Intelligence
  - Memory and attention
  - Coping styles
- Personality
- Financial situation
- Housing situation
- Work-environment
  - Job control
  - Workload
  - Work-life balance
- Social environment
  - Social support (family + friends)
  - Relationship status / state
- Conflict



# Mental Health in Academia

- Undergraduate students (US):

- 11% extreme stress levels
- 11% symptoms of depression
- 15% symptoms of anxiety

The prevalence and correlates of depression, anxiety, and stress in a sample of college students

R. Beiter, R. Nash, M. McCrady, D. Rhoades, M. Linscomb, M. Clarahan, S. Sammut\*

- US graduate students (90% PhDs):

- 41% moderate to severe anxiety
- 39% depression
- 6% in general population

Evidence for a mental health crisis in graduate education

Teresa M Evans<sup>1</sup>, Lindsay Bira<sup>2</sup>, Jazmin Beltran Gastelum<sup>3</sup>, L Todd Weiss<sup>4</sup> & Nathan L Vanderford<sup>4,5</sup>

- PhD candidates:

- 25% concerned about mental health
- 12% sought assistance

## A love–hurt relationship

*Nature's 2017 PhD survey reveals that, despite many problems with doctoral programmes, PhD students are as committed as ever to pursuing research careers.*

- Academic staff (UK):

- 37% prevalence of mental health disorders

Understanding mental health  
in the research environment

A Rapid Evidence Assessment



# Methodology: GHQ-12

- General Health Questionnaire
  - 12-items
  - More than 4 symptoms indicates elevated risk for mental health problems (GHQ4+)
  - Not a diagnostic tool

Tension, feeling under constant pressure

Unhappy or depressed

Lack of sleep

Unable to overcome difficulties

Concentration problems

Not enjoying normal day-to-day activities

Lack of self-confidence

Not feeling happy

Sense of not playing a useful role

Difficulty in making important decisions

Not able to face problems

Feeling of worthlessness



# Mental Health among PhD Candidates

Work organization and mental health problems in PhD students

Katia Levecque<sup>a,b,\*</sup>, Frederik Anseel<sup>a,b,c</sup>, Alain De Beuckelaer<sup>d,e,a</sup>,  
Johan Van der Heyden<sup>f,g</sup>, Lydia Gisle<sup>f</sup>

- Belgian PhD candidates:
  - 51% experiences psychological distress
  - 32% so many symptoms that they were at extreme risk
  - Comparison with (1) higher education students, (2) highly educated individuals, (3) highly educated employees
  - Respectively 1.85, 2.43 and 2.84 higher risk for developing MH problems
- Confirmatory study in Leiden (NL):
  - 38.3% showed more than 4 symptoms

THE MENTAL WELL-BEING OF  
LEIDEN UNIVERSITY PhD  
CANDIDATES

# Mental Health Problems among German PhD Candidates

- German research landscape
- N2 network
- Surveys at Max Planck PhDnet and Helmholtz Juniors in 2017
- Joint survey in 2018

# Factors affecting Mental Health in Academia

- Work-life and life-work balance
- Financial situation and funding opportunities
- Job demands
- Job control
- (Perception of) career perspectives
- Influence on decision making
- Relationship to supervisor
- Belonging to a minority group (gender, nationality etc.)
- Social support

# Suggestions for Improvement

- Personal level
- Institutional level
  - Supervision and leadership
  - Financial security and job security
  - Work demands and work-life balance
  - Career development
  - Administrative and material support
  - Social environment
- Systemic level