

A man on the left and a woman on the right are shown from the chest up, facing each other. Both have their hands raised to their foreheads in a contemplative or stressed pose. The man is wearing a white shirt and a dark vest, and the woman is wearing a brown and white striped sweater. The background is a solid light beige color.

Student Mental Health

A public mental health
perspective

**prof. dr. Ronny
Bruffaerts**

KU LEUVEN

Valérie Van Hees

SI
HO SUPPORT CENTRE INCLUSIVE
HIGHER EDUCATION



Content Presentation

- State of play on student mental health
- Public mental health perspective
- Spearheads of the Flemish Student Mental Health Policy
- Q&A



Part 1:

What does (international) research teach us about student mental health?

Common emotional problems
Risk and protective factors
Help-seeking behavior

Studying in higher education

18-24 years
emerging
adulthood

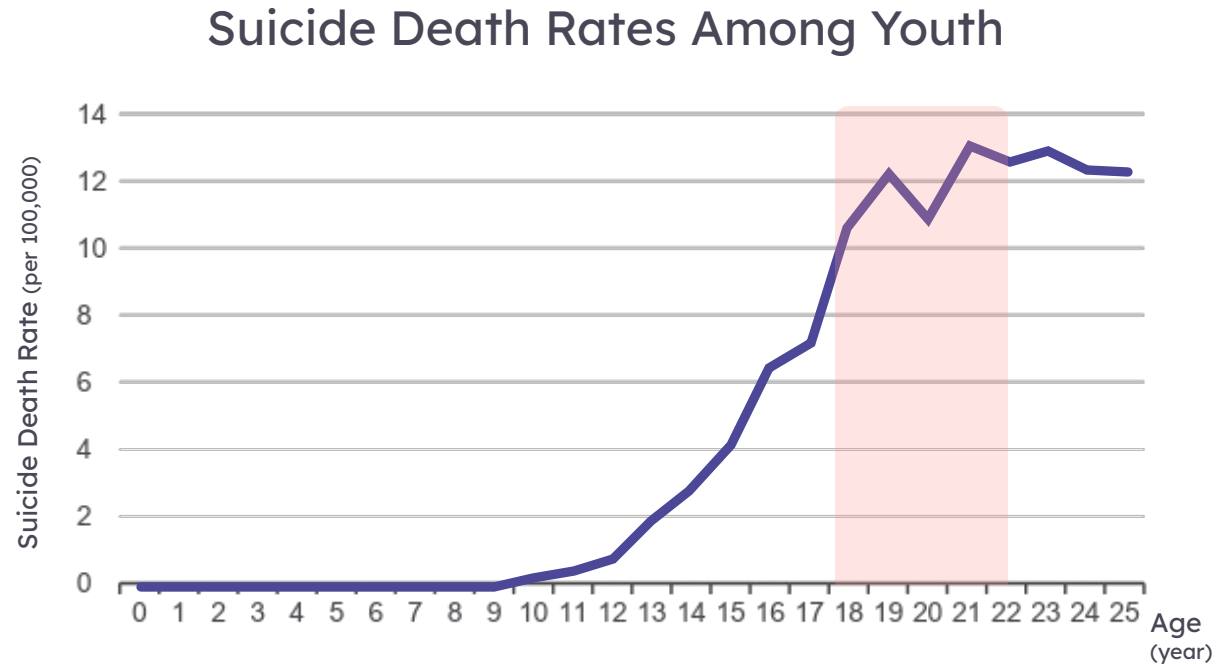
Opportunities

- Changes and challenges
- Identity exploration
- Focus on friends

Studying in higher education

Negative outcomes

- Mental disorders
- Suicide risk



Centers for Disease Control, 2011

Mental health

Emotional
problems

VS

Mental
disorders

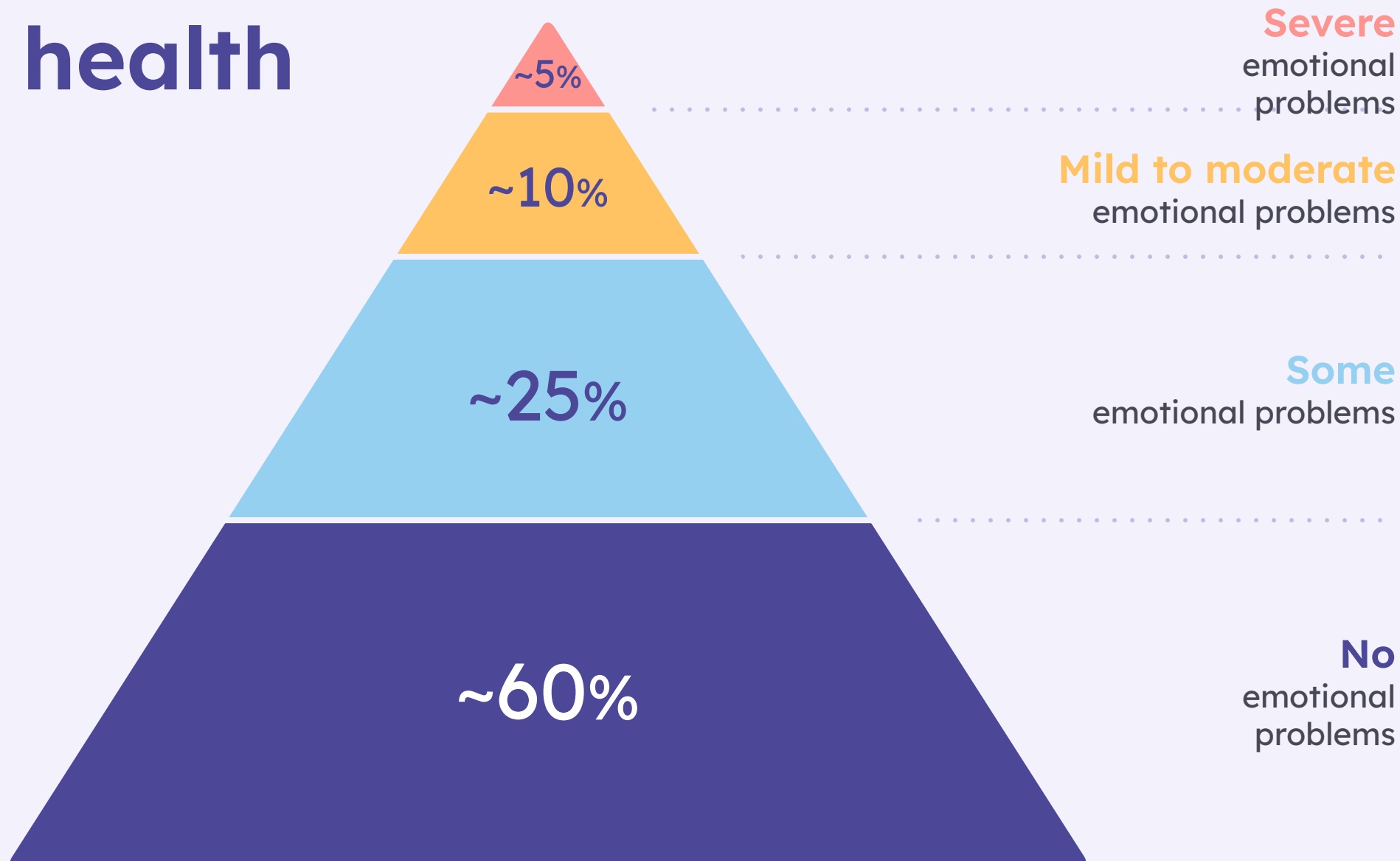
General population

33%
emotional
problems

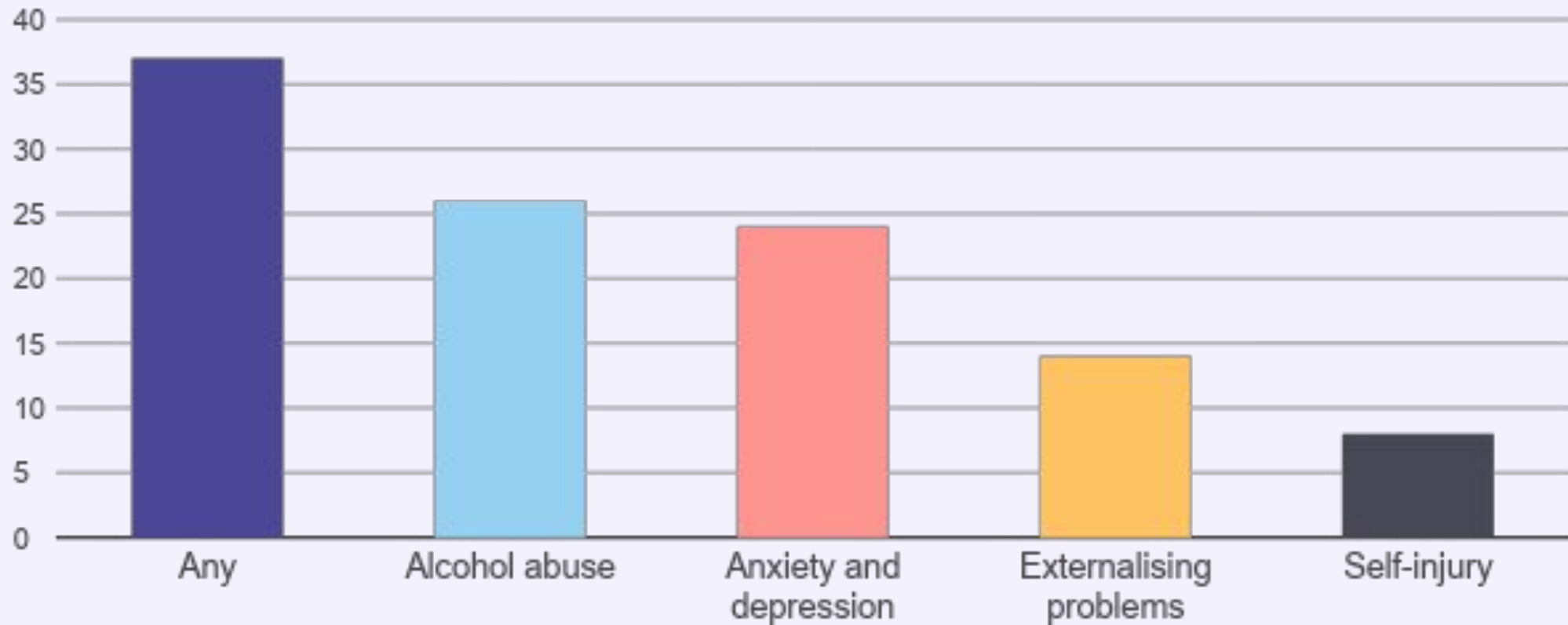
15%
mental disorders
(20% for students)

75%
onset before
27 years

Mental health students

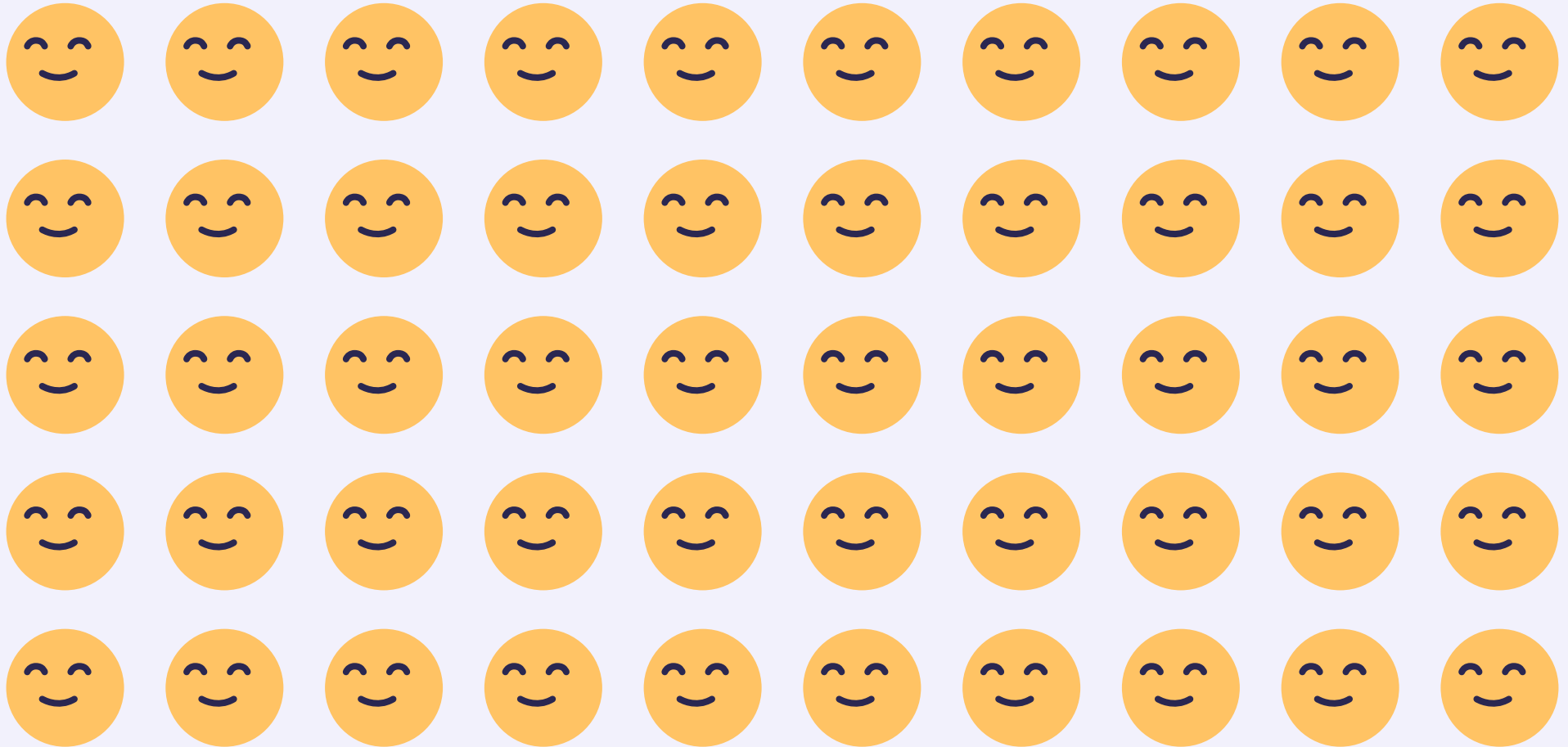


Emotional problems in higher education

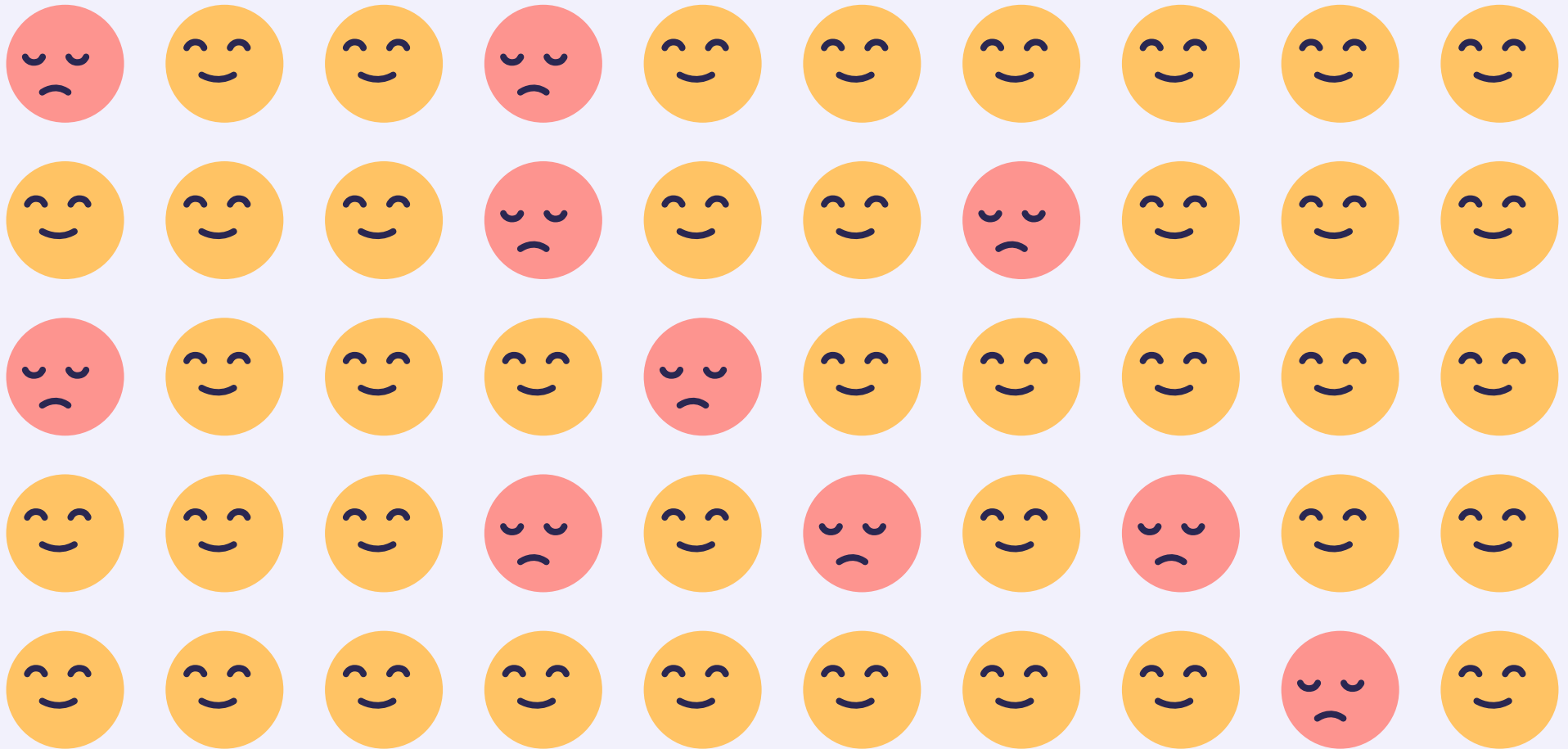


Jackson, 2009; Bailer et al., 2008; Slutske, 2005; McCabe et al., 2007; Rosiers et al., 2011; Mortier et al., 2015; Kiekens et al., 2016; Bruffaerts et al., 2018; Zivin et al., 2009; Verger et al., 2009; Vazquez & Blanco, 2006; Eisenberg et al., 2009; 2011

Anxiety & depression



Anxiety & depression



To what extent did COVID-19 affect student mental health?



Booming reports...

Up to 95% affected

29-36% anxiety

37-39% depression

23-71% stress



SYSTEMATIC REVIEW
published: 17 July 2021
doi: 10.3389/fpsyg.2021.687102



JOURNAL OF AMERICAN COLLEGE HEALTH
<https://doi.org/10.1002/jacoh.10120>

MAJOR ARTICLE

Anxiety, depression, and stress prevalence among college students during the COVID-19 pandemic: A systematic review and meta-analysis

Chenyi Wang, MB^{1,2}, Wen Wen, MB^{1,2}, Haifu Zhang, MB^{1,2}, Jie Ni, MB¹, Jingjie Jiang, MB¹, Yongran Cheng, MS¹, Mengyun Zhou, MB¹, Lan Ye, PhD¹, Zhanhui Feng, MD, PhD¹, Zhongjun Ge, MB¹, Hong Luo, MD, PhD¹, Mingwei Wang, MD, PhD¹, Xingwei Zhang, MD, PhD¹ and Weimin Liu, MD¹

¹Hangzhou Institute of Cardiovascular Disease, Hangzhou Medical Key Discipline, Affiliated Hospital of Hangzhou Normal University, Hangzhou, China; ²Hangzhou Medical College, Hangzhou, China; ³Department of Molecular & Cellular Physiology, Shinshu University School of Medicine, Asahi, Matsumoto, Japan; ⁴Basic Medical College, Guizhou Medical University, Guiyang, China; ⁵Department of Neurology, Affiliated Hospital of Guizhou Medical University, Guiyang, China; ⁶The Fourth People's Hospital of Lianjiang, Hengzhou, China

ABSTRACT

Background: Since the end of 2019, the coronavirus disease (COVID-19) outbreak rapidly became a pandemic. The psychological state of people during the COVID-19 pandemic has gained interest. Our aim was to study the prevalence of anxiety, depression, and stress in college students during the COVID-19 pandemic. **Methods:** A systematic search of Medline, Embase, Web of Science, and the Cochrane Library was conducted up to September 20, 2020. Reviewers independently assessed full-text articles according to predefined criteria. Stata16SE was used to calculate the prevalence and 95% confidence intervals (CI) of anxiety, depression, and stress among college students from different countries. A random effects model was adopted. The Egger test was used to determine publication bias. **Results:** A total of 280 references were reviewed, and 26 papers met our inclusion criteria, for a total of 436,299 college students. Thirteen studies involved non-Chinese college students, and 15 studies involved Chinese college students. The prevalence of anxiety, depression, and stress was 29% (95% CI, 19–39%), 37% (95% CI, 32–42%), and 33% (95% CI, 28–39%), respectively. **Conclusions:** The COVID-19 pandemic has had a negative psychological effect on college students, and the prevalence of anxiety, depression, and stress among Chinese college students is lower than among non-Chinese college students.

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KEYWORDS

COVID-19; anxiety; depression; stress; college student; meta-analysis

PLOS ONE

RESEARCH ARTICLE

Psychological impacts from COVID-19 among university students: Risk factors across seven states in the United States

Matthew H. E. M. Browning^{1,2}, Lincoln R. Larson^{3,4}, Iyana Shastrievska¹, Alessandra Higdon¹, Orlin McAniffin¹, Lauren Mullerbach¹, Scott Chaffin¹, Tye M. Vu¹, Jennifer Thorman¹, Nathan Reigner¹, Elizabeth Corvill Matros¹, Ashley D'Antonio¹, Marco Heitrich^{1,5}, Gregory N. Botman^{1,6}, Hector Olvera Alvarez^{1,7}

¹ Vicksa Biotech & Science Lab, Department of Data, Data Science and Tourism Management, Clemson University, Clemson, SC, United States of America; ² Department of Parks, Recreation and Tourism Management, North Carolina State University, Raleigh, NC, United States of America; ³ Department of Parks, Recreation and Tourism Management, Clemson University, Clemson, SC, United States of America; ⁴ Department of City and Metropolitan Planning, The University of North Carolina at Charlotte, Charlotte, NC, United States of America; ⁵ Sustainability and Progress Research Lab, School of Sustainability, Arizona State University, Tempe, AZ, United States of America; ⁶ Advanced Computing & Data Science, Clemson Computing & Information Technology, Clemson University, Clemson, SC, United States of America; ⁷ Department of Social and Conservation, V.A., Texas College of Forestry and Conservation, University of Arkansas, Fayetteville, AR, United States of America; ⁸ Recreation, Parks, and Tourism Management Department, College of Human and Health Development, Pennsylvania State University, PA, United States of America; ⁹ Power, Ecosystems and Society, College of Forestry, Oregon State University, Corvallis, OR, United States of America; ¹⁰ Department of Human Geography and Spatial Planning, Faculty of Economics, Utrecht University, Utrecht, The Netherlands; ¹¹ Environmental & Well-Being, 16, School of Environment and Forest Sciences, University of Washington, Seattle, WA, United States of America; ¹² School of Nursing, Oregon Health & Science University, Portland, OR, United States of America

* INTRODUCTION

Abstract

Background

University students are increasingly recognized as a vulnerable population, suffering from higher levels of anxiety, depression, substance abuse, and disordered eating compared to the general population. Therefore, when the nature of their educational experience radically changes—such as sheltering in place during the COVID-19 pandemic—the burden on the mental health of this vulnerable population is amplified. The objectives of this study are to 1) identify the array of psychological impacts COVID-19 has on students, 2) develop profiles to



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Impact of the COVID-19 Pandemic on the Mental Health of College Students: A Systematic Review and Meta-Analysis

Yang Li^{1,2}, Aileen Wang^{1,2}, Yalin Wu^{1,2}, Mao Han^{1,2} and Huihui Huang^{1,2*}

¹ Institute of Sports Science, Peking University, Beijing, China; ² Research Institute of Sports Health, Peking University, Beijing, China; ³ School of Sports Science, Beijing University of Physical Education, Beijing, China; ⁴ School of Sports Science, Beijing University of Physical Education, Beijing, China

Background: The coronavirus disease (COVID-19) pandemic has been spreading and brought unprecedented psychological pressure on people across the entire globe since December 2019.

Objectives: To synthesize the existing evidence of the prevalence of mental health issues during the epidemic and provide the basis for mental health education.

Materials and methods: The literature search was conducted in nine databases from December 2019 to February 2020. The risk of bias for each study was assessed, and the random-effects meta-analysis was used to estimate the prevalence of specific mental health problems. The review protocol was registered in PROSPERO with the registration number CRD42020088610.

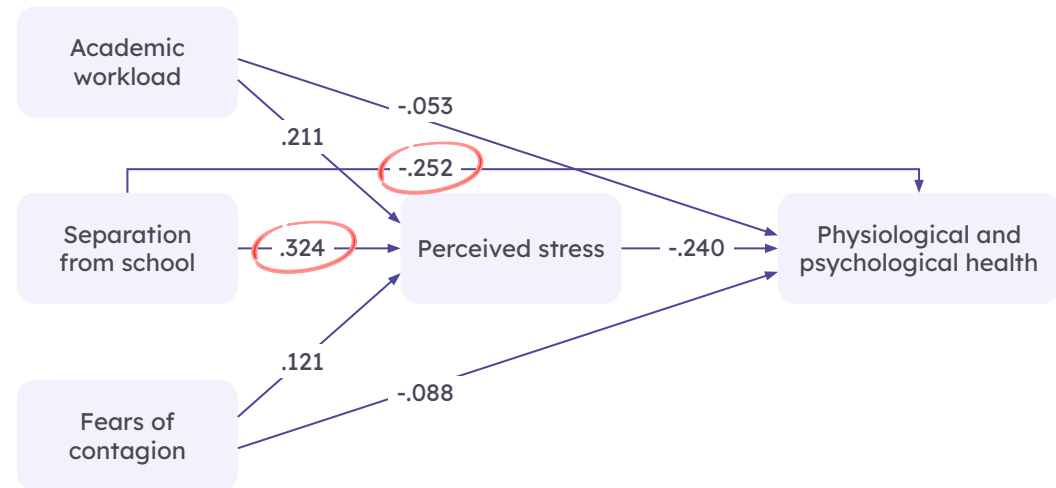
Results: After 27 studies were included in the analysis with a total of 708,415 participants combined, 14 mental health problems were gathered. Meta-analysis showed that the prevalence of depression was 29% (95% CI: 27–31%), and that of anxiety was 30% (95% CI: 28–32%). Subgroup analysis indicated that the prevalence of depression and anxiety varied among nations and due to the study site. The prevalence of depression (95% CI: 28–32%) and anxiety (95% CI: 28–32%) in non-Chinese college students was higher than those in Chinese college students (29%, 95% CI: 27–31% and 30%, 95% CI: 28–32%). The proportion of depression

“COVID-19 has a negative psychological effect”

But is every student equally affected?

Risk factors

- Prior anxiety problems ~2.5
- Low SES at home ~2.4
- Female gender ~2.0
- (Proximity of) knowing someone infected ~1.5
- >8 hours / day on screens ~1.2



Protective factors

Social support, connectedness, resilience

Leuven College Surveys

(as a part of WHO's WMH International College Student initiative): longitudinal representative panel surveys since 2012 (N~21,700)

All-in-all

~**4/10** students screens positive for a mental disorder – **not more than before**

Pandemic-related variations?

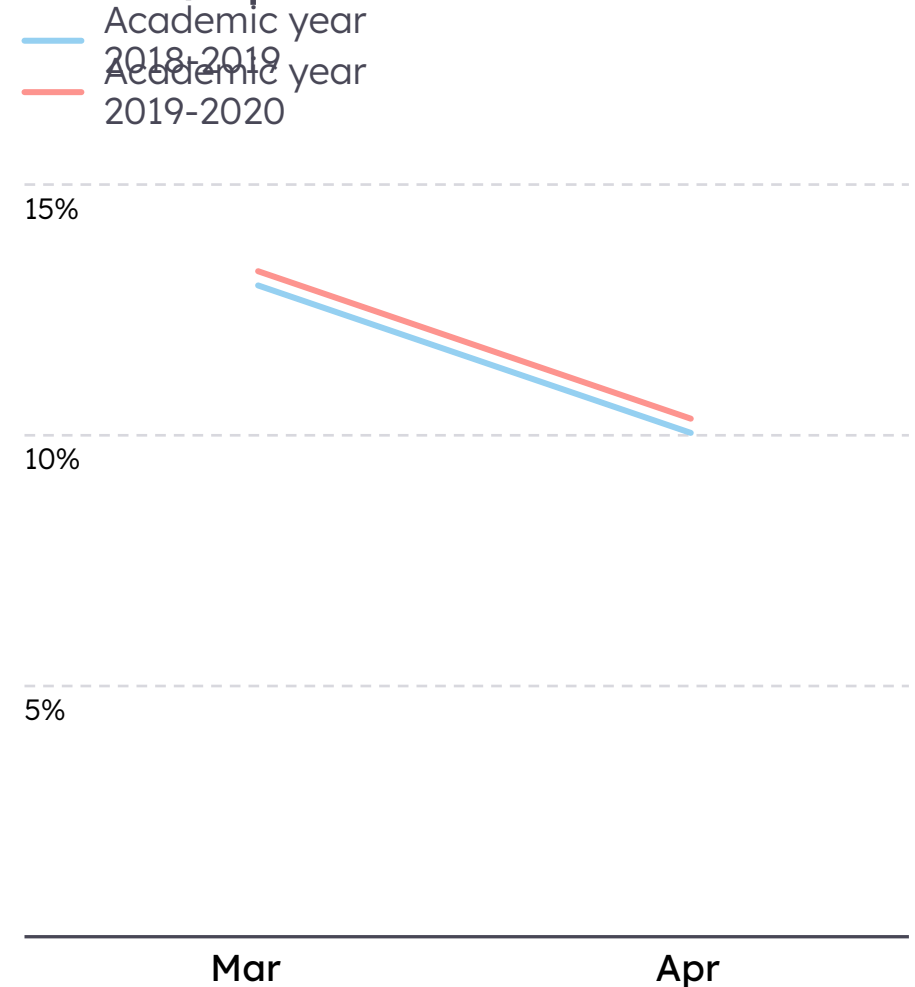
Wave 1: 1/4 no stress, 55% stress, sadness, anxiety but not often, **1/5 high impact**

Wave 2: 1/3 good-to-excellent mental health; 44% moderate, **1/5 low mental health**

Incidence of disorders ~4%, **lower incidence than in pre-pandemic times**

Suicidality

March/April 2019 and 2020



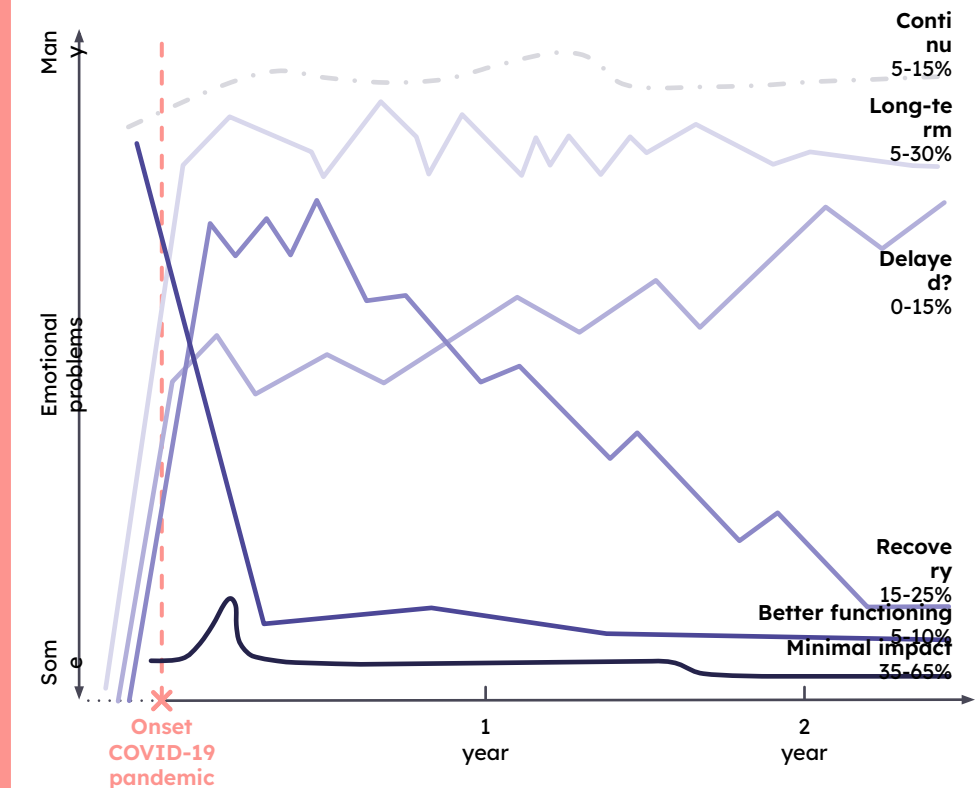
(Tentative) conclusions

‘Netto’ impact of the pandemic seems mild-to-moderate: what was there before the pandemic is much more important than what developed during the pandemic

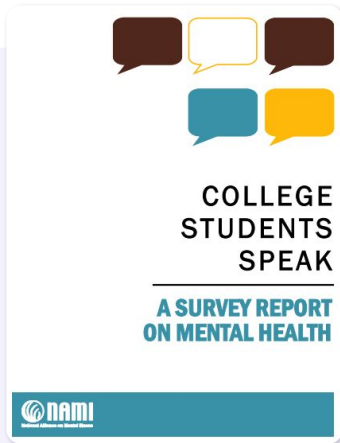
- Increased anxiety & depressive feelings (not disorders!)
- Low incidence & decreased suicides
- No specific pandemic-related mental disorders
- Underlying, already existing problems came to the surface

Specific attention for specific disorders / clinical conditions increase

- Suicidal thoughts and behaviors (not suicides!)
- Disordered eating problems



Are emotional problems among students increasing over time?



Services students use

Does a higher demand for and use of services equals higher prevalence of disorders?



Language we use

- “73% of the college students have experienced a mental health crisis during the college period”
- Does this mean that all of these have a mental disorder?

Stability and change of mental health problems

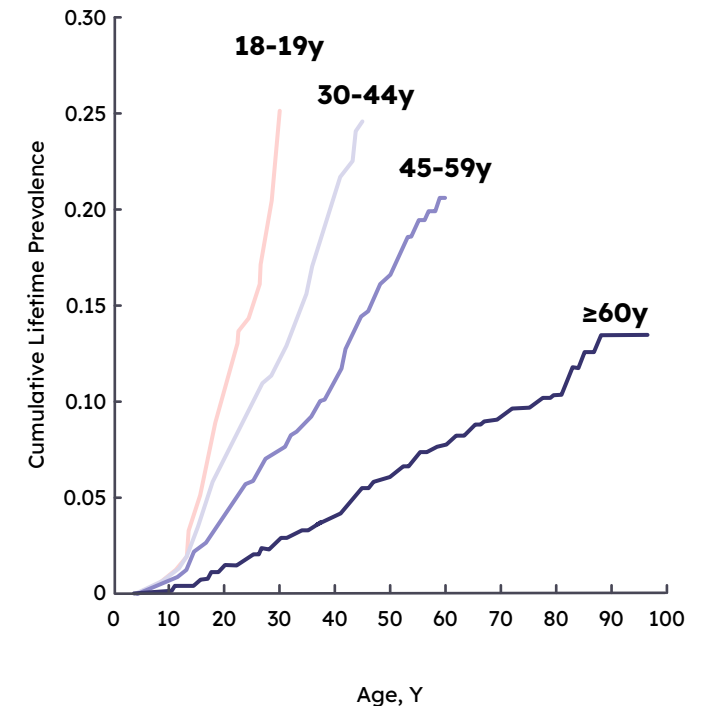
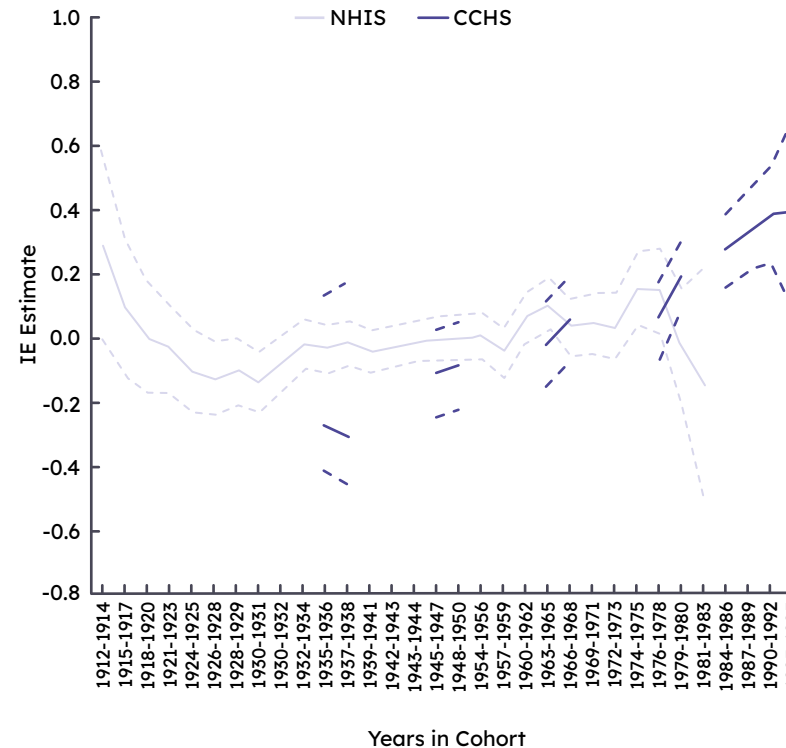
www.nature.com/scientificreports

**SCIENTIFIC
REPORTS**
nature research

Distribution of psychological distress is stable in recent decades and follows an exponential pattern in the US population

Shinichiro Tomitaka^{1,2}, Yohei Kawasaki³, Kazuki Ide^{4,5,6}, Maiko Akutagawa⁶, Yutaka Ono⁷ & Toshi A. Furukawa²

The prevalence of psychological distress is fairly stable in industrialised countries in recent decades, but the reasons for this stability remain unknown. To investigate the mechanisms underlying stability of psychological distress in the general population of the United States, we analysed the mathematical patterns of the distribution of psychological distress in recent decades. The present study utilised the Kessler psychological distress scale (K6) data from the 1997–2017 United States National Health Interview Survey. We used overlap coefficients and graphical analysis to investigate the stability and mathematical patterns of the K6 distribution. Overlap coefficients and graphical analysis demonstrated that the distribution of K6 total scores was stable in the United States over the past two decades. Furthermore, the distributions of K6 total scores exhibited an exponential pattern, with the exception of the lower end of the distribution. These findings suggest that the lack of change in the prevalence of psychological distress over several decades is due to the stability of psychological distress distribution itself. Furthermore, the stability of the distribution of psychological distress over time may be linked to the exponential pattern of psychological distress distribution.



Younger cohorts: different patterns of emotional problems?

Cohort effects:

more recent born
people more prone
to mental disorders

Also: different expressions of emotional problems?

- More eating disorders
- More self-injury
- More impulse-related behaviors (binging in alcohol and/or substances)
- Higher suicidality (not in behaviors, but more likely in thoughts)

What is the prevalence of NSSI among first year college students worldwide?

NSSI

Lifetime
17.7%



Recency of
NSSI = 44%

12 Month
8.4%



Severe
NSSI = 28%

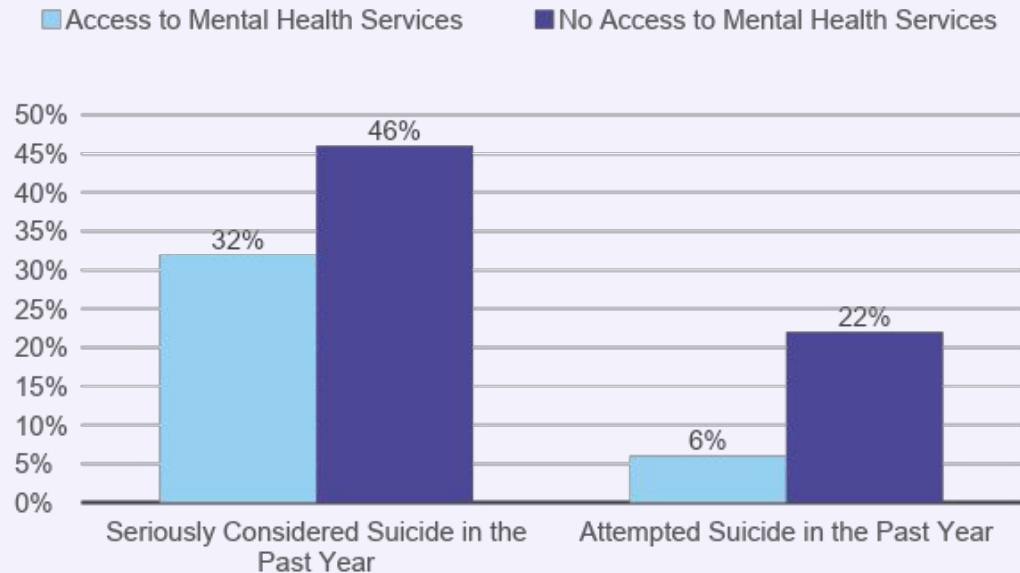
≥5 times per year
2.3%

Survival models predicting the onset of suicidal thoughts and behaviors within respondents without lifetime mental disorders.

	Suicide ideation OR (95% CI)	Suicide plan OR (95% CI)	Suicide attempt OR (95% CI)
NSSI thoughts	3.0*** (1.8-5.1)	3.3** (1.5-7.3)	0.8 (0.1-6.2)
NSSI	2.5*** (2.0-3.2)	3.1*** (2.1-4.6)	5.3*** (2.2-13.1)
<i>n(person-years)</i>	71,734	73,966	74,917

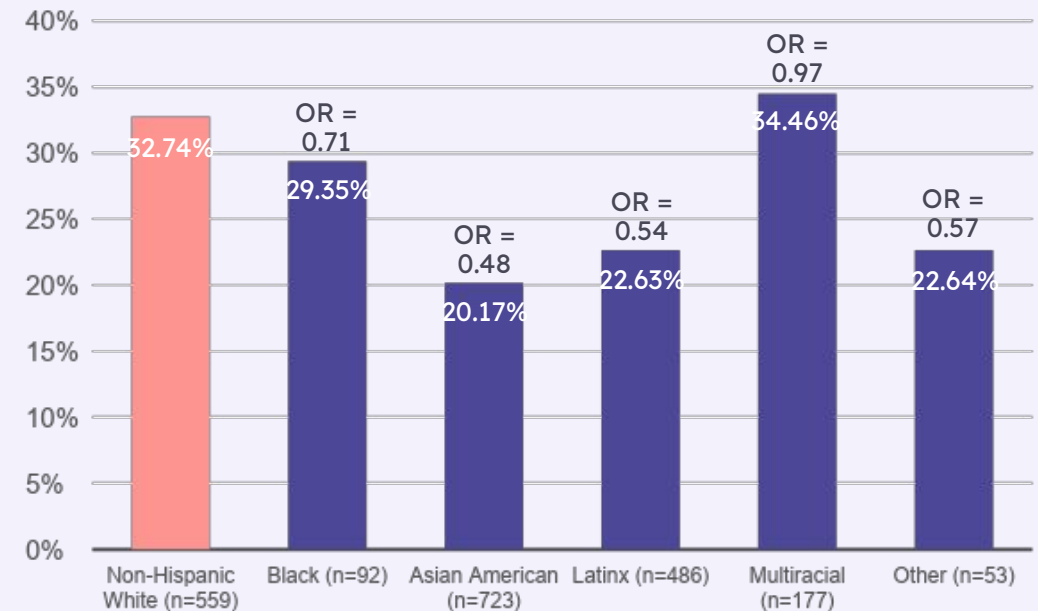
Are minority groups at higher risk?

Suicide Risk Among LGBTQ College Students by Access to Mental Health Services



LGBTQ+

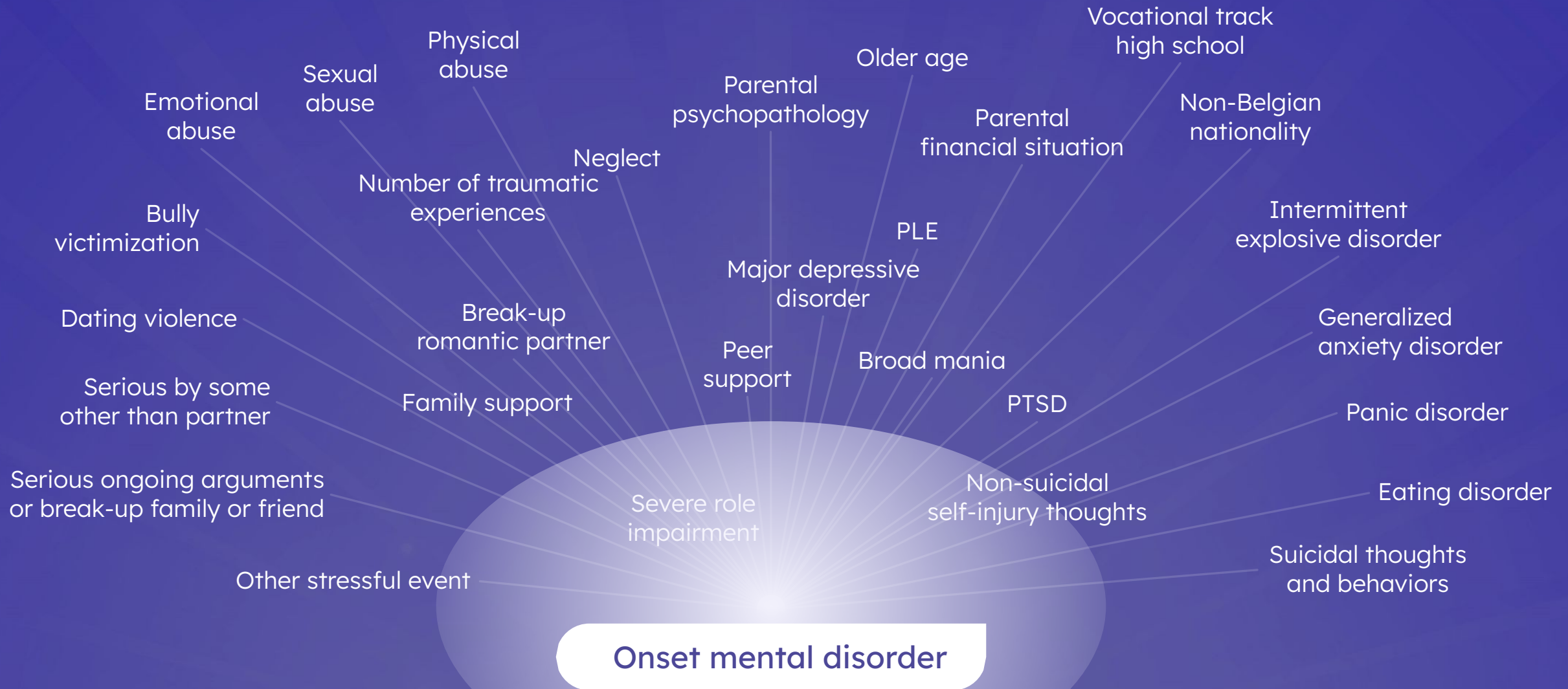
- Using broad definition: up to 6/10 first-year students
- Have up to 17x higher odds of developing mental disorders
- In general low help-seeking (comparable to non-LGBTQ+)

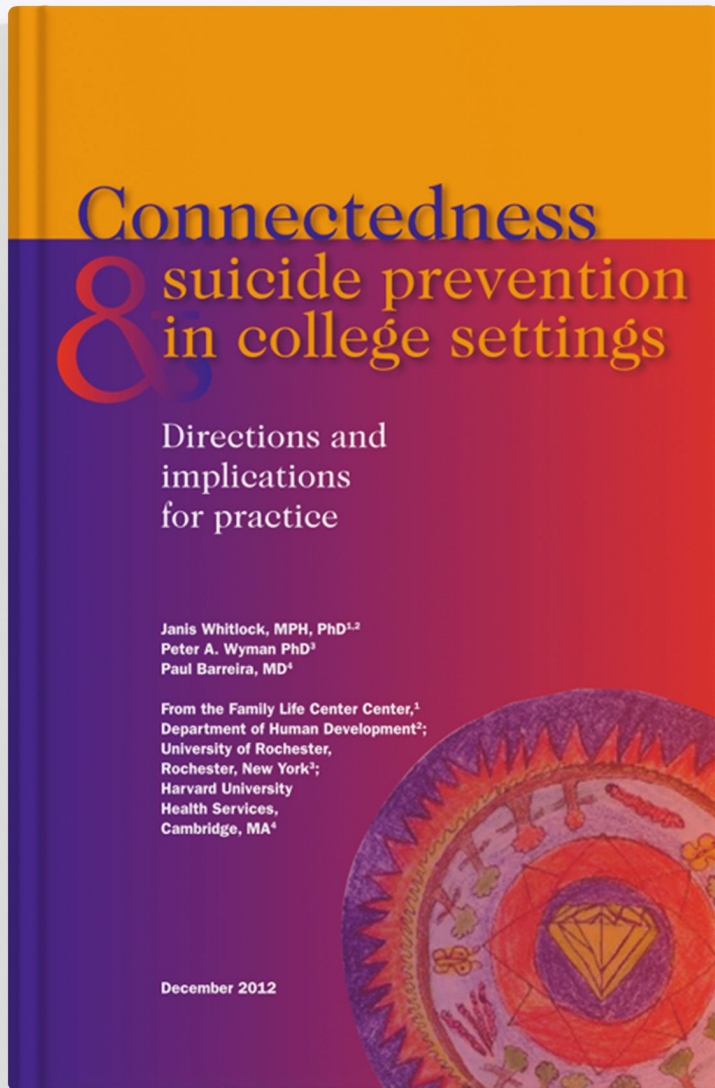


Racial minority groups

- Higher rate of mental disorders
- Stigma & victimization

Risk factors





Connectedness/friendship

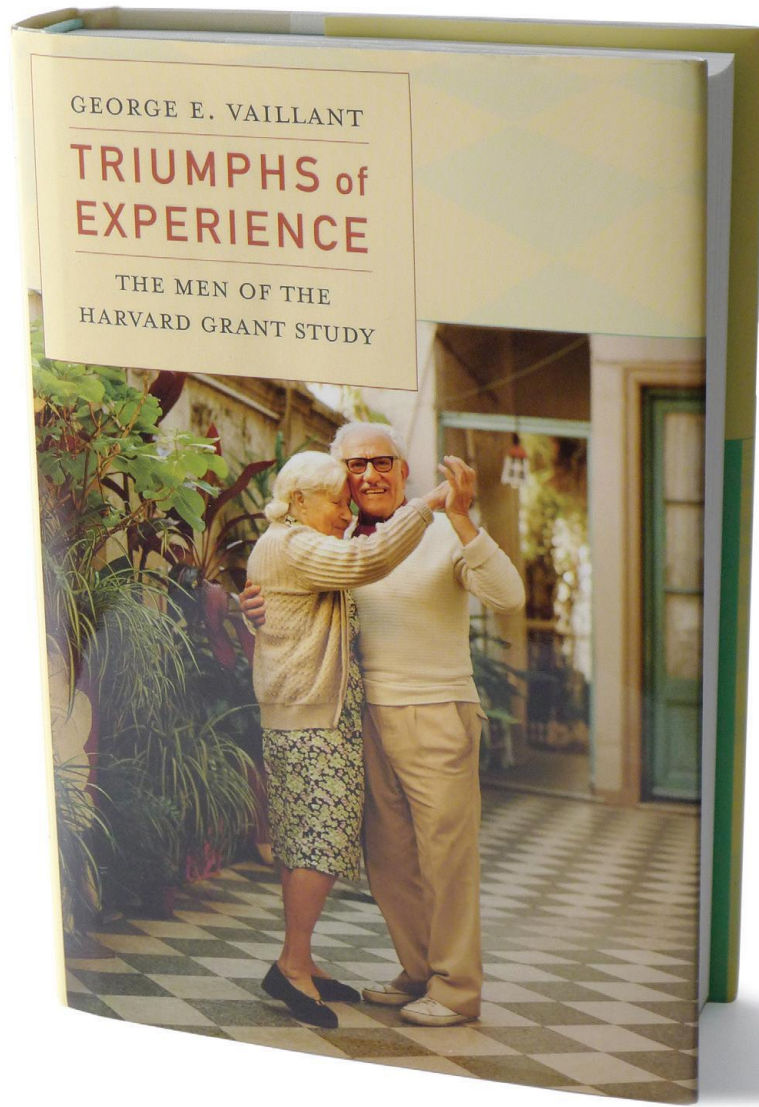
**> 2x
less** emotional
problems

Good friendships leads to
increased resilience

Connectedness higher education institution

**~ 2x
less** emotional
problems

Buffers anxious and
depressed feelings



Protective factors

- Friendship & connectedness

In 1938, Harvard University began following 724 participants as part of the longest-running study on human development in history. The study was developed to determine what makes us happy.



The study explored every part of who we are, from physical and psychological traits to social life and IQ, to learn how we can flourish. Findings from the study were published in the 2012 book *Triumphs of Experience*, with key results showing that happiness and health aren't a result of wealth, fame or working hard, but come instead from our relationships:

- Social connections are really good for us, and loneliness kills. People who are more socially connected to family, friends, or community, are happier, physically healthier, and live longer than people who are less well connected.
- It's not just the number of friends you have, and it's not whether or not you're in a committed relationship, but it's the quality of your close relationships that matters. Living in conflict or within a toxic relationship is more damaging than being alone.
- Good relationships don't just protect our bodies, they protect our brains. Good quality relationships were related to sharper memory.



“The conclusion of the study is that *connection* is the whole shooting match...”

The more areas in your life you can make connection, the better. Full stop.”



George Vaillant Director of the Harvard Grant Study (1972-2003)

The
Harvard
Gazette

HEALTH & MEDICINE

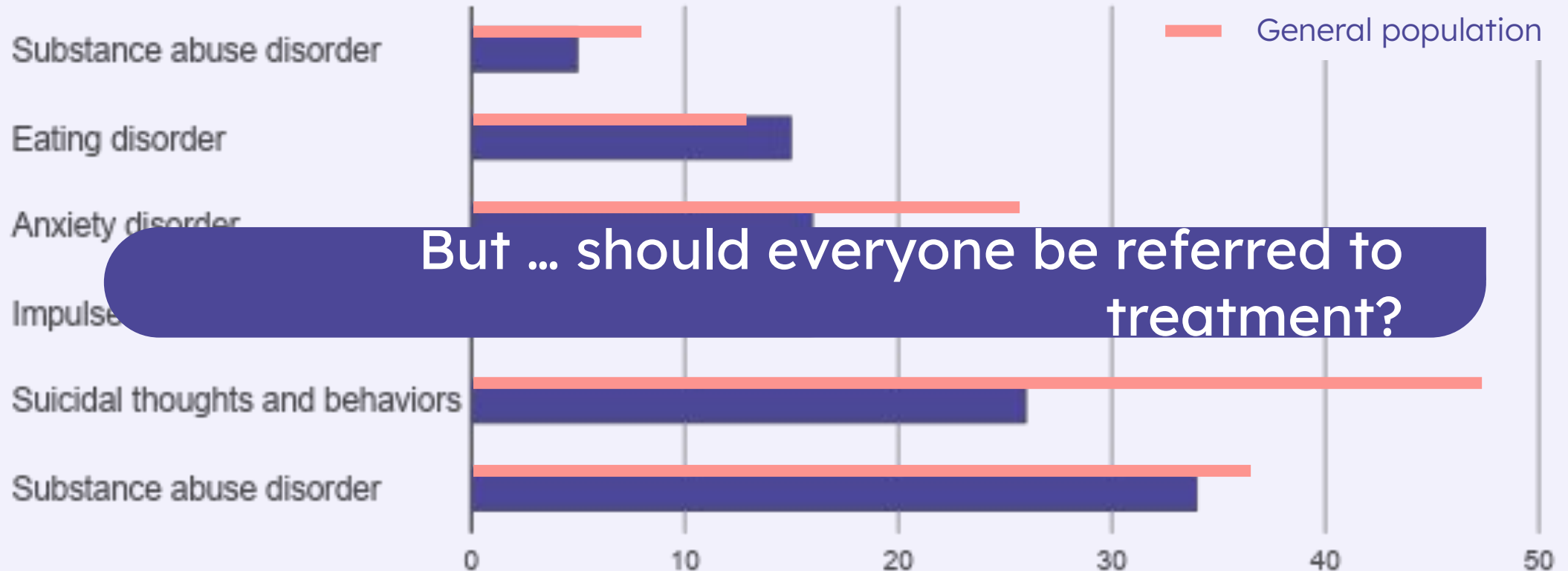
Good genes are nice, but joy is better

Connectedness as protective factor

		No suicidality	No internalising disorder	No externalising disorder	No substance-related disorder
PREVIOUSLY	Gender	NS	Male	NS	Female
	Financial situation previously	NS	NS	NS	NS
	Family relationship previously	NS	+	NS	NS
	Friends previously	++	+	NS	NS
	Peers previously	++	NS	NS	
	Relations previously	NS	NS	NS (Except dating)	NS
	Connectedness school previously	+	+	NS	NS
CURRENT	Family relationships current	+	NS	NS	++
	Peers current	+	NS	NS	NS
	Partner current	NS	NS	NS	NS
	Friends current	++	NS	NS	++
	Connectedness university current	NS	NS	++	NS

Help-seeking behavior

12 month help-seeking behavior students



But ... should everyone be referred to treatment?

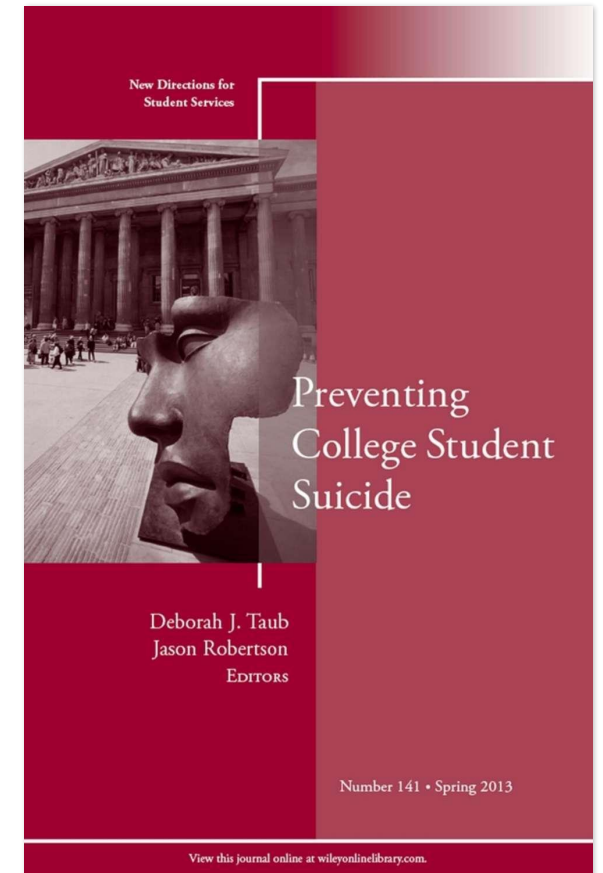
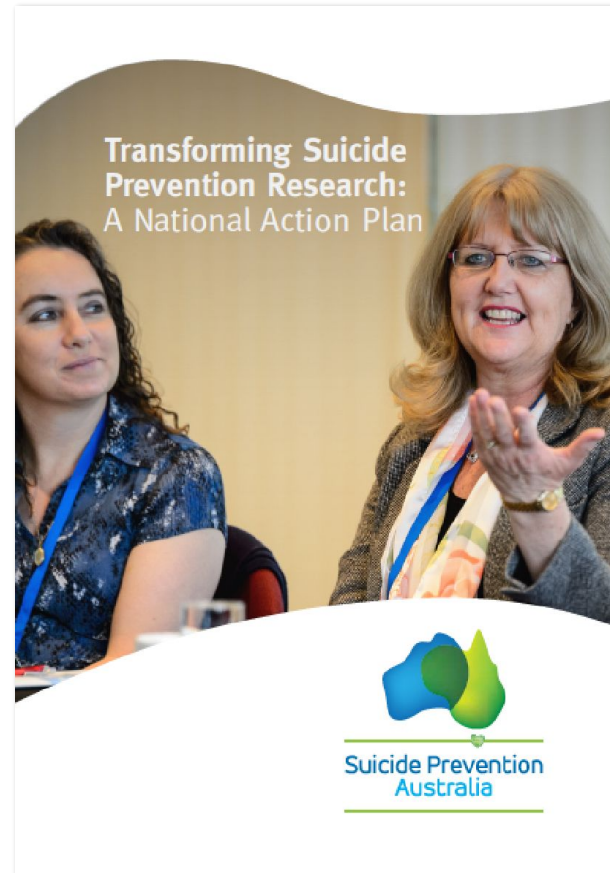


Part 2: Public mental health perspective

Principles
Community of Caring
Macro- meso and micro level

A public mental health perspective

- Public mental health model vs individual clinical model
- Prevention, promotion and treatment
- “Preventing suicide starts at home, in schools, and in communities, not when someone (...) enters a therapist’s office”
(Whitlock, Wyman & Barreira, 2012, p.4)



Principles mental health perspective

Screening and
early
detection

ABC of Psychology - need
crafting

Foster and promote positive
mental health and students' resilience and
self-management

Diversified and
dynamic
Service care offer

“

The public mental health perspective combines forms of **universal prevention** (targeting the general population), **selective prevention** (targeting population groups at high risk) and **indicated prevention** (targeting individuals with incipient symptoms), in addition to clinical interventions for high-risk individuals.

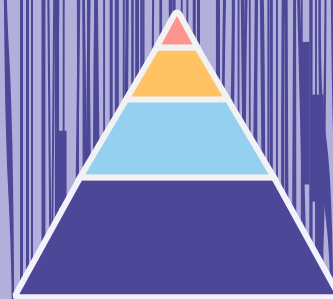
Focus on the entire student population

Can we intervene before
onset?

“

It presupposes a **coordinated cooperation** of different actors at different levels, especially the **micro level** (i.c. the level of the [individual] student), the **meso level** (i.c. action points for the organisation of assistance and networking) and the **macro level** (i.c. action points for the university or college, other HEI, umbrella organisations, the Department of Education, ..., among others).

Focus on a *community of caring approach*



STUDENT

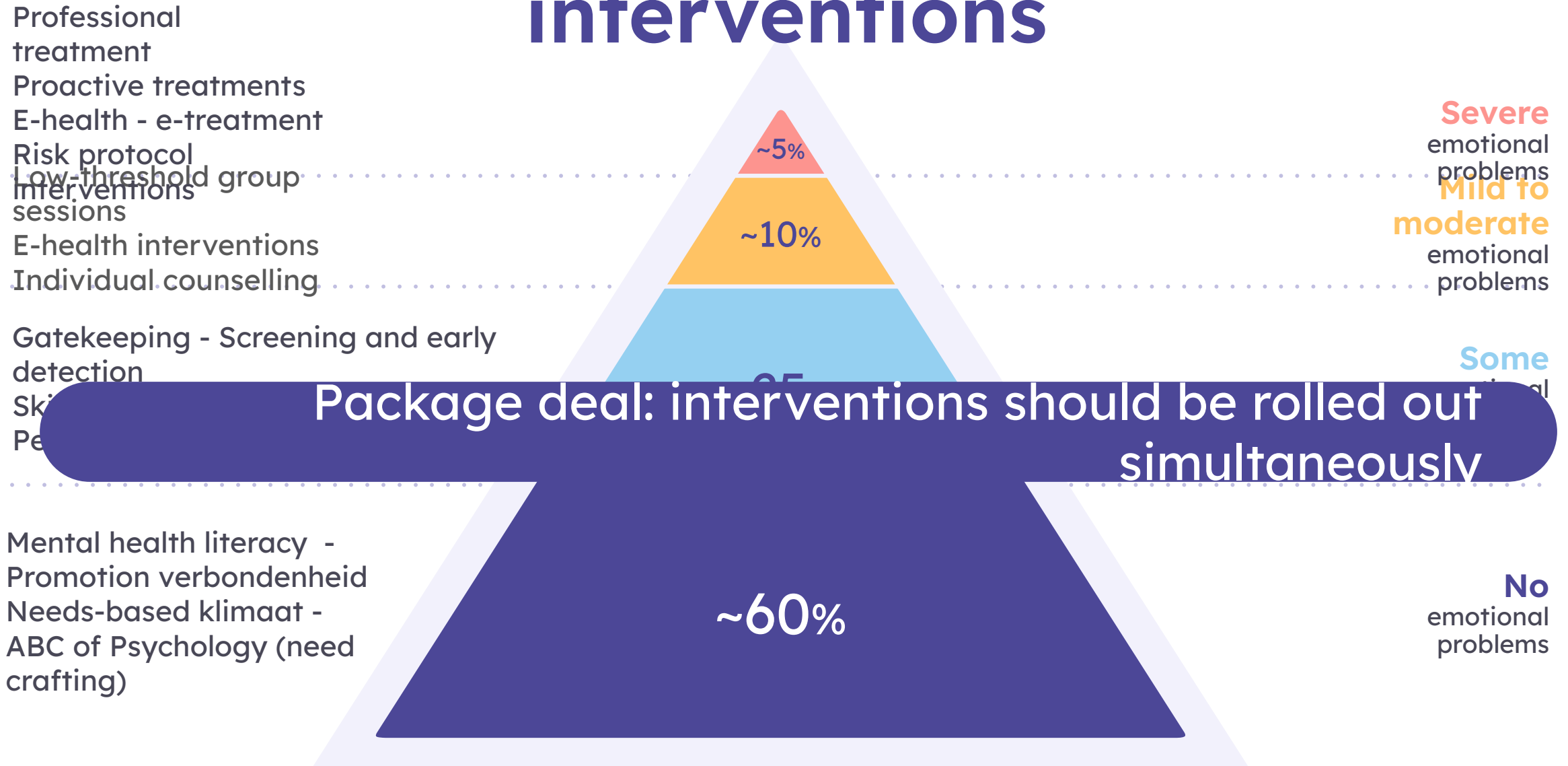
AGE | GENDER | NEUROBIOLOGY | IDENTITY
BEC-OFFPSYCHOLOGY | MOTIVATION | ACADEMIC
ACHIEVEMENT | MENTAL HEALTH

MICRO LEVEL

MESO LEVEL

MACRO LEVEL

Micro level: a diversified range of interventions





Part 3: Flemish Student Mental Health Policy

Mental Health Monitor
MoodSpace
National learning network
Support HEI community of caring

Mental Health Monitor

MoodSpace

About MoodSpace

NL EN



Mental Health Monitor

Info Library

Connectedness

Get help

Self-help

Worried about someone?

Powerful stories

Podcasts

DASHBOARD

Mental Health Monitor

The Mental Health Monitor (Welzijnsmonitor) annually measures the mental health, resilience and study motivation of students in Flemish higher education via questionnaire. Students are followed up throughout their academic career. This allows appropriate interventions, such as MoodSpace, to be built in a scientific way.



About the Mental Health Monitor

The Mental Health Monitor is **an initiative** of Flemish Education Minister Ben Weyts. The Monitor is developed and implemented by Professor Dr. Ronny Bruffaerts (KU Leuven) and Professor Dr. Maarten Vansteenkiste (UGent), in cooperation with the Support Centre Inclusive Higher Education (SIHO).

The Monitor generates **specific action points and recommendations for both policy and practice** that translate to the macro, meso and micro levels. Thus, together we develop a caring welfare policy: **a 'community of caring'**.

The rollout of the Mental Health Monitor is scheduled for October 2022. All universities and universities of applied sciences will distribute the questionnaire to their students.

[Read more](#)

What is the Mental Health Monitor?

The Mental Health Monitor:

- is a **cross-sectional and longitudinal questionnaire survey** on the mental health of college and university students in Flanders and Brussels.

The Mental Health Monitor:

- provides an **annual and multi-year evolutionary picture** in terms of mental health, resilience and school motivation, representative of higher education students;
- Generates **specific practice and policy inputs** by, inter alia:
 - formulating and evaluating **goals** to be achieved regarding good mental health, well-being, resilience and school motivation;
 - articulating annual **specific action points** that translate to the macro, meso and micro levels;
 - formulating **recommendations** for sustainable integration of wellbeing and health policies in higher education.

What measures the Mental Health Monitor?

Input

Engine

Outcomes

Support

Teaching style

....

ABC-needs
satisfaction

Mental Health

ABC = bridge function

- engine for growth
- Signal function vulnerability

ation &
ntity

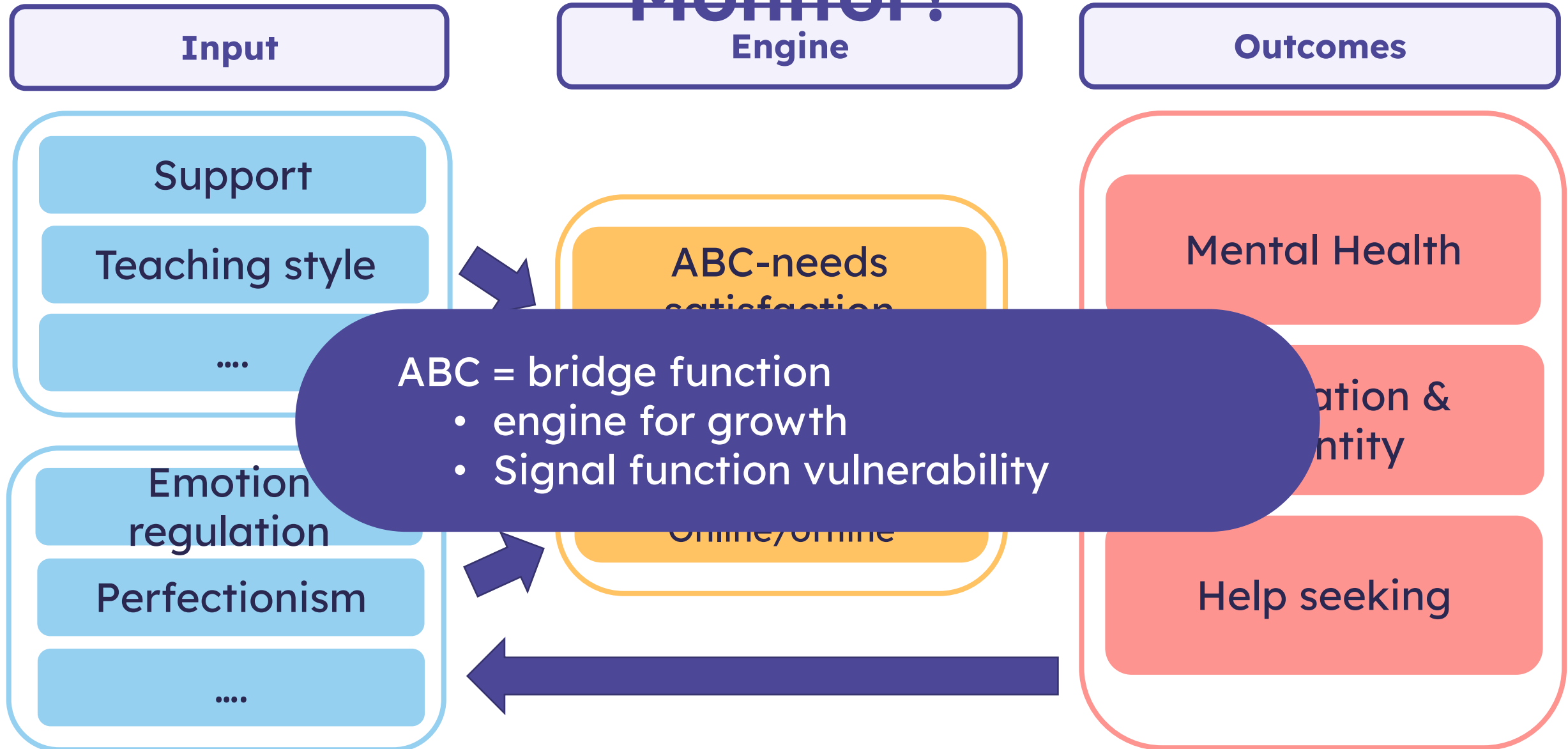
Emotion
regulation

Perfectionism

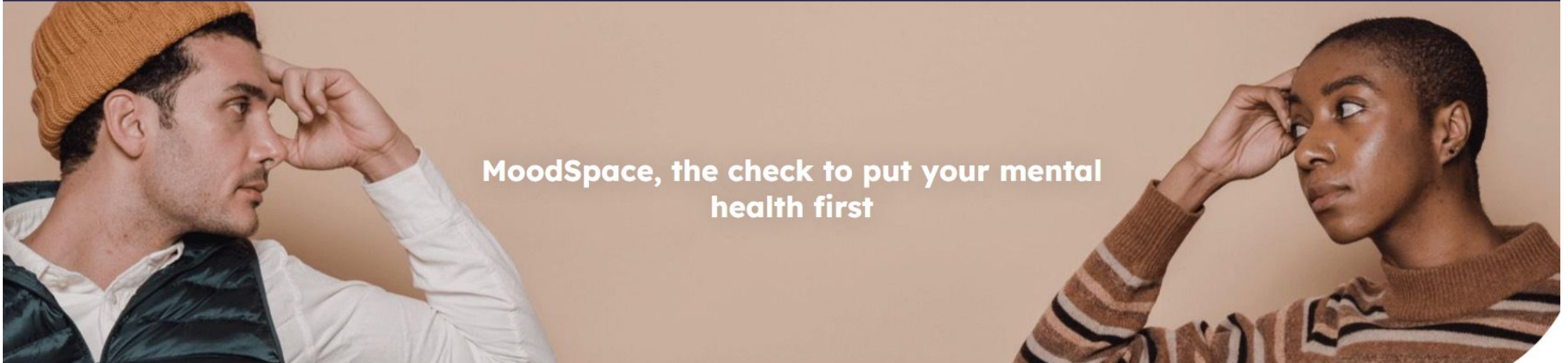
....

Online/online

Help seeking



MoodSpace

[Mental Health Monitor](#)[Info Library](#)[Connectedness](#)[Get help](#)[Self-help](#)[Worried about someone?](#)[Powerful stories](#)[Podcasts](#)

MoodSpace, the check to put your mental health first

M

MoodSpace is a place for students, which is packed with reliable information, tips and self-help tools to tackle emotional problems or to help you study confidently. It offers room for student stories and pep talks, and helps you find the help you need. It is *the* check to put your mental health first. But MoodSpace is also a place where you, as a friend, parent or staff member of a college or university, can discover what you can do.

Emergency help 24/7

Tele-Onthaal

☎ 106

Suicide line

☎ 1813

Awel

☎ 102

On-call GP

☎ 1733

Ambulance

☎ 112

Poison Centre

☎ 070245245

Principles MoodSpace

Public Mental Health Perspective



Community of
caring



Diversified
interventions



Evidence-based

By and for students

“

Diversified interventions

Info Library

Discover information, tips and tricks on connectedness, mental health, resilience and healthy studying.

[➤ Read more](#)

Connectedness

Connectedness is a powerful medicine. Discover the power of meeting fellow students and the ABC of psychology.

[➤ Read more](#)

Mental Health Monitor

The Mental Health Monitor measures the mental health, resilience and study motivation of students.

[➤ Read more](#)

Get help

Whatever concerns you have, there are always people ready to listen, talk and think about things with you.

[➤ Read more](#)

Self-help

Useful self-help modules to help you strengthen your resilience and overcome your challenges.

[➤ Read more](#)

Worried about someone?

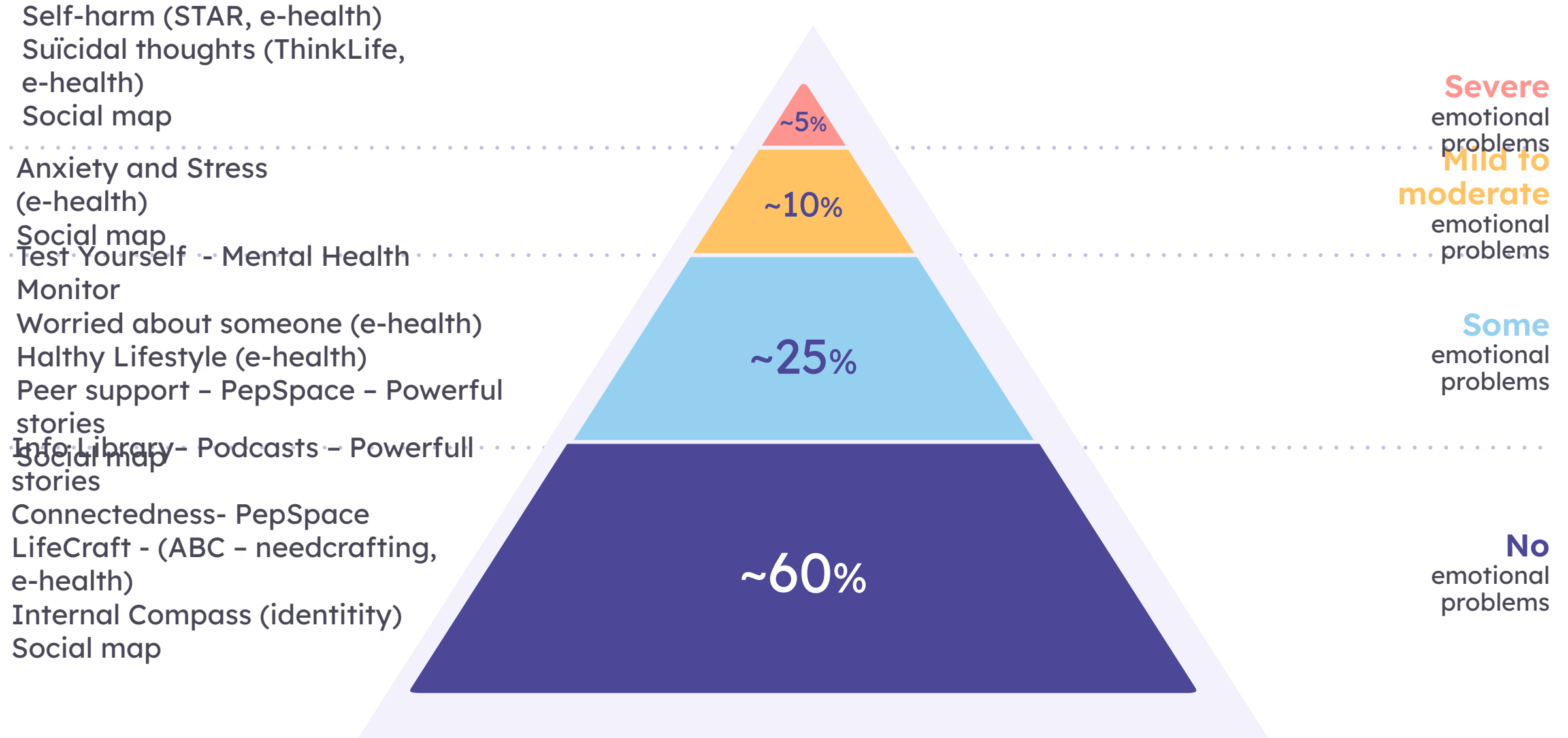
Learn how to recognise signals and what small steps you can take if you are concerned about a fellow student.

[➤ Read more](#)

”

Podcasts – Powerful stories –
PepSpace

Focus MoodSpace



Test yourself

Test yourself

- Anonymously
- 20 questions on mental health: Emotional problems such as anxiety depression, eating disorders, substance use
 - Resilience
 - Quality of Life
 - Impact on daily functioning
 - Psychological basic needs
- Short feedback, tips and referre to to help
- **+ 7748 tests**

A screenshot of a self-test questionnaire interface. At the top, there is a progress bar with 11 numbered steps. Step 1 is highlighted in orange, and steps 2 through 11 are in light purple. Below the progress bar, the first question is "Ben je een student? *". It has two radio button options: "Ja" (selected) and "Nee". The second question is "Wat is je leeftijd? *", which is a dropdown menu currently showing "- Selecteren -" with a red downward arrow icon. The third question is "Wat is je geslacht? *", with three radio button options: "Man", "Vrouw", and "Ander". Below these questions is a checkbox labeled "Ik ga akkoord met de algemene voorwaarden". Underneath the checkbox is a link that says "Lees meer over de zelftest en de algemene voorwaarden". At the bottom of the form is a dark blue button with the white text "Volgende".

1 2 3 4 5 6 7 8 9 10 11

Ben je een student? *

☒ Ja
☐ Nee

Wat is je leeftijd? *

- Selecteren -

Wat is je geslacht? *

☐ Man
☐ Vrouw
☐ Ander

☐ Ik ga akkoord met de algemene voorwaarden
[Lees meer over de zelftest en de algemene voorwaarden](#)

Volgende

“ Self-help

Self-help

- Independently and anonymously
- Evidence-based
- No/Low/Medium/High risk
- Modules: explanations, exercises, testimonials
- Evaluation users
- **+ 2.325 registrations**

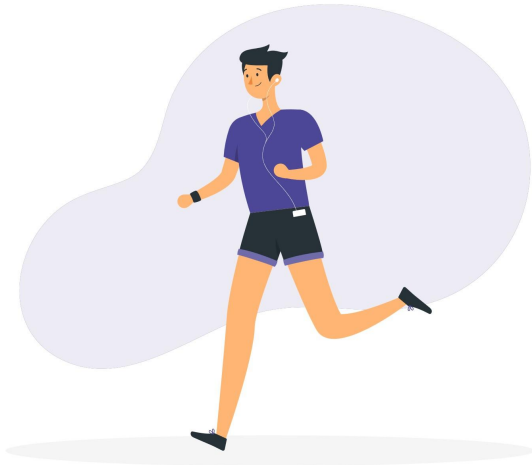


LifeCr
aft

- No/low/medium/High
- 7 modules
- Need crafting

“

Self-help programs



Healty Lifestyle

- No/low/medium/High
- 6 modules



Anxiety en Stress

- Low/medium/High
- 6 modules
- CBT

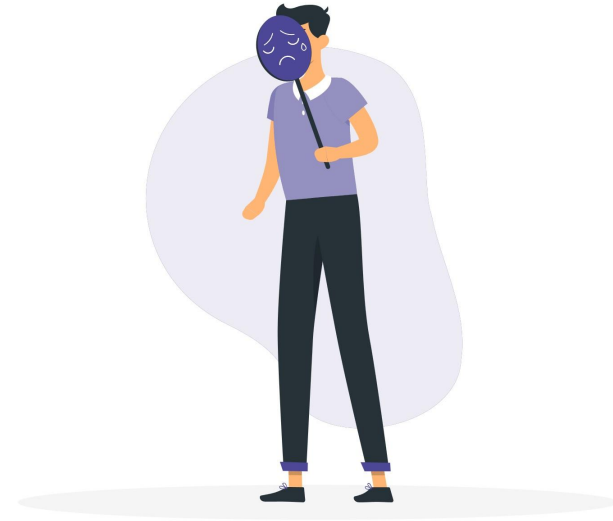
“

Self-help programs



Self-harm

- Medium/High
- 10 modules
- CBT



Suicidal thoughts

- High (Think Life)
- 6 modules
- CBT

“

Powerful stories

You are not alone. Get inspired by other students' stories about vulnerability and doubt. But above all about the power of connectedness.



Carola



Shraavya



Reinout



Pauline

More powerful stories



Miguel



Reinout



Pauline



João

Learning learning network

What?

- Working group
- Trainings and conferences
- Development of didactic materials

- Resilience
- Connectedness
- Menal disorders
- Suicide prevention
- ABC of Psychology
- MoodSpace
- ...

“

The concrete examples of approaches. The exchange with other HEIs. Inspiring examples give energy to question and possibly improve certain things in one's own institution.

Support HEI towards a community of caring

“

- Financial means
- Development and implementation of gatekeeper trainings



Gatekeeping



Signal - risk detection



Communication

Towards a community of caring