

### **OVERVIEW**

- Mental health problems of college students
- Prevention and treatment of mental health problems of college students
- The 'Caring Universities' project
- Digital interventions in the Caring Universities project
- Conclusions

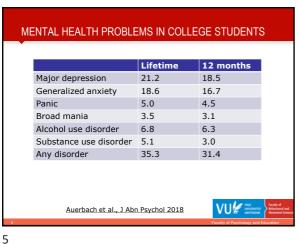


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Mental health problems in college students



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# MENTAL HEALTH IN COLLEGE STUDENTS • Incidence of MDD in 1st year: 6.9% (Ebert et al., 2019b) · 20.4% report role impairment (home management, work/studies, close relationships, social life): 10% without vs. 42.9% with $\geq$ disorder (p<0.01) (Alonso et al., 2019) · Lifetime prevalence of suicidal ideation, plans, and attempts: 32.7%, 17.5%, and 4.3% (Mortier et al., 2018) Mental health problems are associated with reduced academic functioning: 2.9-4.7% AYP reduction (academic year percentage) (Bruffaerts et al., 2018) VU!

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## · Helpseeking (Ebert et al., 2019a): Only 24.6% would seek help for emotional problems · Reasons: preference to handle problems alone (56%) preferring to talk with friends/relatives (48%) But also (other studies: stigma, costs, doubts whether treatments work

LOW UPTAKE OF SERVICES

- · Lifetime and 12-month treatment rates are low,
- with estimates of 25.3-36.3% (Bruffaerts, 2019)

Mental Health and COVID-19: Early evidence of the pandemic's impact World Health Organization  $\underline{\text{https://www.who.int/publications/i/item/WHO-2019-nCoV-Sci} \ \ Brief-Mental\_health-2022.1}$ 

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# COVID-19 AND MENTAL HEALTH IN COLLEGE STUDENTS

- Mental health was already a major public health challenge before the pandemic
  - > Very high prevalence and incidence
  - > Low uptake of services
  - > Limited effects of existing treatments
- Some increase in prevalence
- · Several high risk groups, e.g.
  - > Pre-existing mental disorders
  - > Older adults

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> Young people, including college students

Prevention and treatment of mental health problems of college students

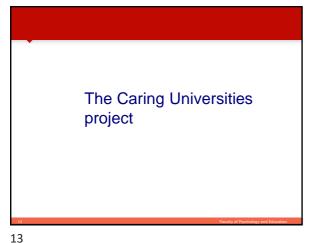
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# EVIDENCE-BASED INTERVENTIONS FOR MENTAL HEALTH PROBLEMS IN COLLEGE STUDENTS

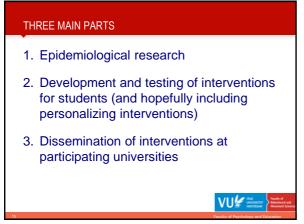
- 31 meta-analyses
- 608 unique primary randomised trials
- Effective interventions are available prevention and treatment of depression, anxiety, and stress,
- Effects for alcohol problems are small
- Effective interventions are also available for smoking cessation, test-anxiety, internet addiction, procrastination, and bystander sexual assault prevention programs

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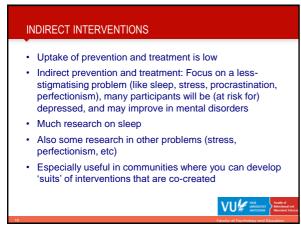


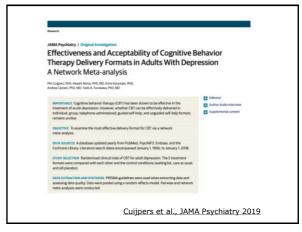


The 'Caring Universities' project
Nine universities and universities of applied sciences > 250,000 students
Almost a 10th participating university
Yearly surveys
13 digital tools bij 2025
8 already available
Moving to single-session interventions









# NETWORK META-ANALYSIS TREATMENT FORMAT IN CBT FOR DEPRESSION

- 155 studies with 15,191 patients
- Formats: individual, group, telephone, guided self-help (including internet-based), unguided self-help (all through the internet)
- · Comparators: waiting list, care-as-usual, placebo

Cuijpers et al., JAMA Psychiatry 2019

RANKED FOREST PLOT FOR EFFECTS (CAU AS REFERENCE) 95% CI -0.92~-0.52 SMD (95% CI) SMD Group Telephone -0.63 -0.99~-0.27 -0.80~-0.45 Individual -0.63 -0.70~-0.25 Guided self-help -0.47 -1.01~0.59 Unguided self-help -0.13 -0.39~0.12 Waiting list 0.39 0.18~0.60 Reference treatment: CAU

# MAIN RESULTS

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- No significant differences between individual, group, telephone, guided self-help (only small difference between group and guided self-help)
- Significantly more effective than waitlist (SMDs 0.87 to 1.02), care-as-usual (SMDs: 0.47 to 0.72), and unguided self-help (SMDs: 0.34 to 0.59).
- Sensitivity analyses excluding non-internet-based guided self-help: comparable outcomes
- Acceptability (study drop-out for any reason) was significantly higher in individual (RR=1.44) and group CBT (RR=1.39) compared to guided self-help.

EFFECTS OF INTERNET-BASED TREATMENTS FOR DIAGNOSED MENTAL DISORDERS Disorder N d **95% CI NNT** Depression 32 0.67 0.51~0.81 Social phobia 20 0.76 0.62~0.91 2.4 Panic 15 1.08 0.77~1.39 1.8 GAD 0.62 0.31~0.93 3.0 53 All anx. dis. 0.80 0.68~0.93 Andrews et al., 2018; Pauley et al., Psychol Med 2021; Karyotaki et al., 2021; Cuijpers et al., 2019

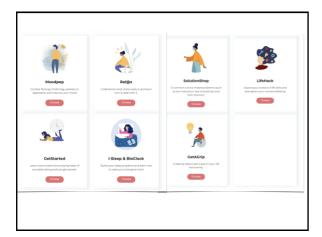
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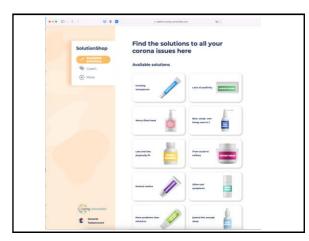
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# WHO DELIVERS THE INTERVENTIONS? Trained clinical psychology students Curriculum from "Psychological well-being practitioners" delivering low-intensity CBT (from IAPT in the UK; curriculum from Exeter University in the UK). Integrated into teaching of master students in clinical psychology Delivery of interventions as part of training program (low costs) Supervision by a licensed psychologist Separate grant for the development of this curriculum (dr. Leonore de Wit).

Digital interventions in the Caring Universities project

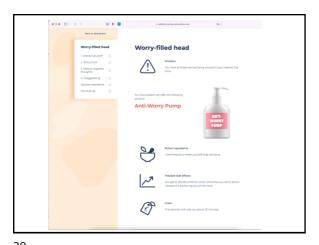
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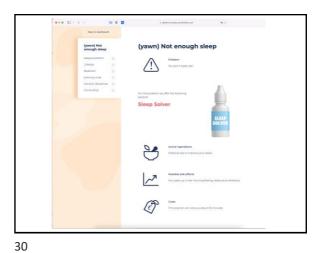


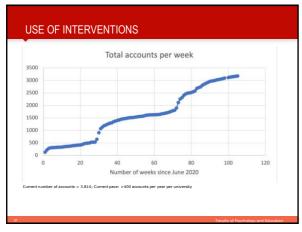


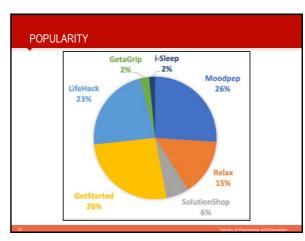
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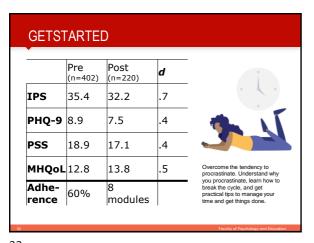
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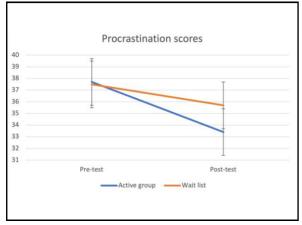


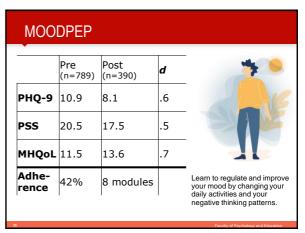


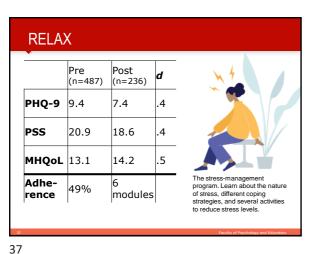




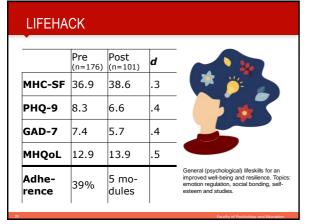
Active	Pre (n=155)	Post (n=89)	d	Wait list	Pre (n=160)	Post (n=122)	d
IPS	37.7	33.4	.8	IPS	37.5	35.7	.5
PHQ-9	11.4	9	.4	PHQ-9	11.2	9.4	.4
PSS	22.1	20.1	.5	PSS	22.4	22.2	.1
GAD-7	9.1	7.5	.4	GAD-7	8.8	8.2	.2
MHQoL	12.8	13.8	.4	MHQoL	12.1	12.6	.1







SOLUTIO	NSHOP				
	Pre (n=126)	Post (n=68)	d	•	
PHQ-9	9.9	8	.5		
PSS	19.9	17.9	.3		
GAD-7	9.6	7.7	.8		
MHQoL	12.5	13.3	.3	The solutions to 13 corona- related problems students ma	
Adhe- rence	41%	5 modules		face, such as lack of routine, loss of social interaction, motivational problems and more.	
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IMPROVING ADHERENCE · Visual style in line with student's tastes • Visuals: images, videos, gifs, comics TIME TO BE PRODUCTIVE! • Interactivity: material is applied to the student's life on the spot through questions and small assignments Guidance of a coach, and being able to select your own coach Coach messages students upon inactivity Reminder emails when inactive for a while

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# IMPROVING ADHERENCE: PLANS

- Gamification in the form of badges that can be earned while doing the program
- New registration flow: questionnaires as part of the program rather than separate 'research'.
   Giving personalized feedback based on answers
- Being able to schedule time for the program in your own Google/Outlook calendar through the platform
- Being able to send yourself reminder emails at a time that suits you
- · One-session interventions

Conclusions

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## **CONCLUSIONS**

- Mental health of college students is important subject
- Strengthening of services for students is needed
- The WMH-ICS initiative is collecting worldwide data on mental health
- The Caring Universities project offers digital interventions
- Using the 'indirect approach' to prevention and treatment

THANK YOU FOR YOUR ATTENTION!

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