

Distinct Pathways from Attentional **Shifting** and **Focusing** to **Insomnia** and **Depression**:

The Mediating Role of **Rumination**



Drey Bianchi

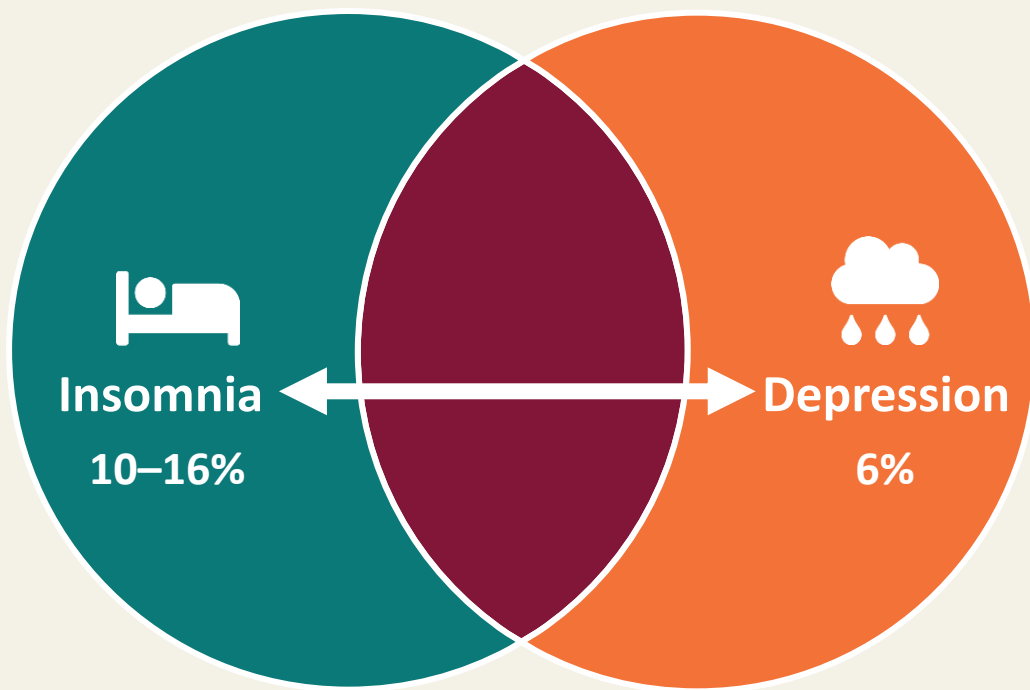
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INTRODUCTION

Insomnia and depression



~40%

of patients with **insomnia** suffer from a **comorbid mental health condition**

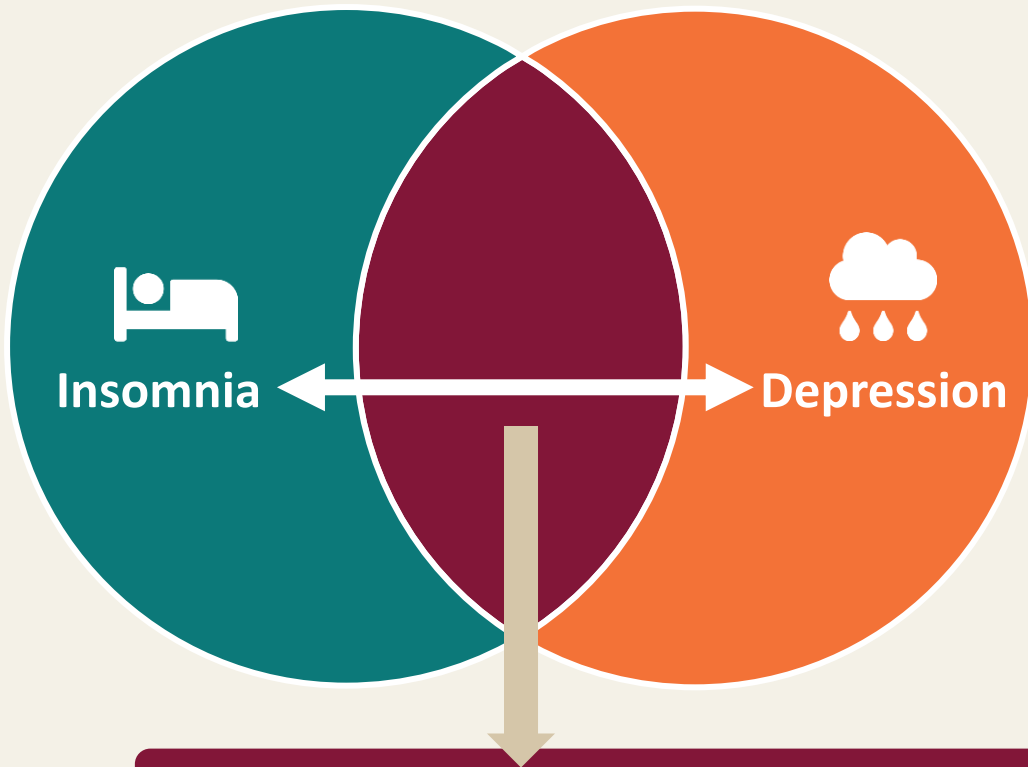
~78%

of patients with **depression** experience **insomnia symptoms**

The comorbidity is still too often overlooked

INTRODUCTION

Process-based and transdiagnostic perspective



Why a shared process?

A single dysfunctional psychological process
→ multiple disorders

Observable **here and now**
→ accessible to **intervention**

Which **processes** explain the **onset** and **maintenance** of psychological difficulties?
How do **shared processes** account for **comorbidity**?
How can these processes be **targeted** to improve **multiple co-occurring** disorders?

INTRODUCTION

Attentional control and rumination



Attentional control

Deliberately directing one's attention, sustaining it, and resisting distractions



Rumination

Repeatedly and **passively** focusing one's attention on distress and its causes

⇔ Attentional shifting

Redirect attention from **one task or stimulus to another**

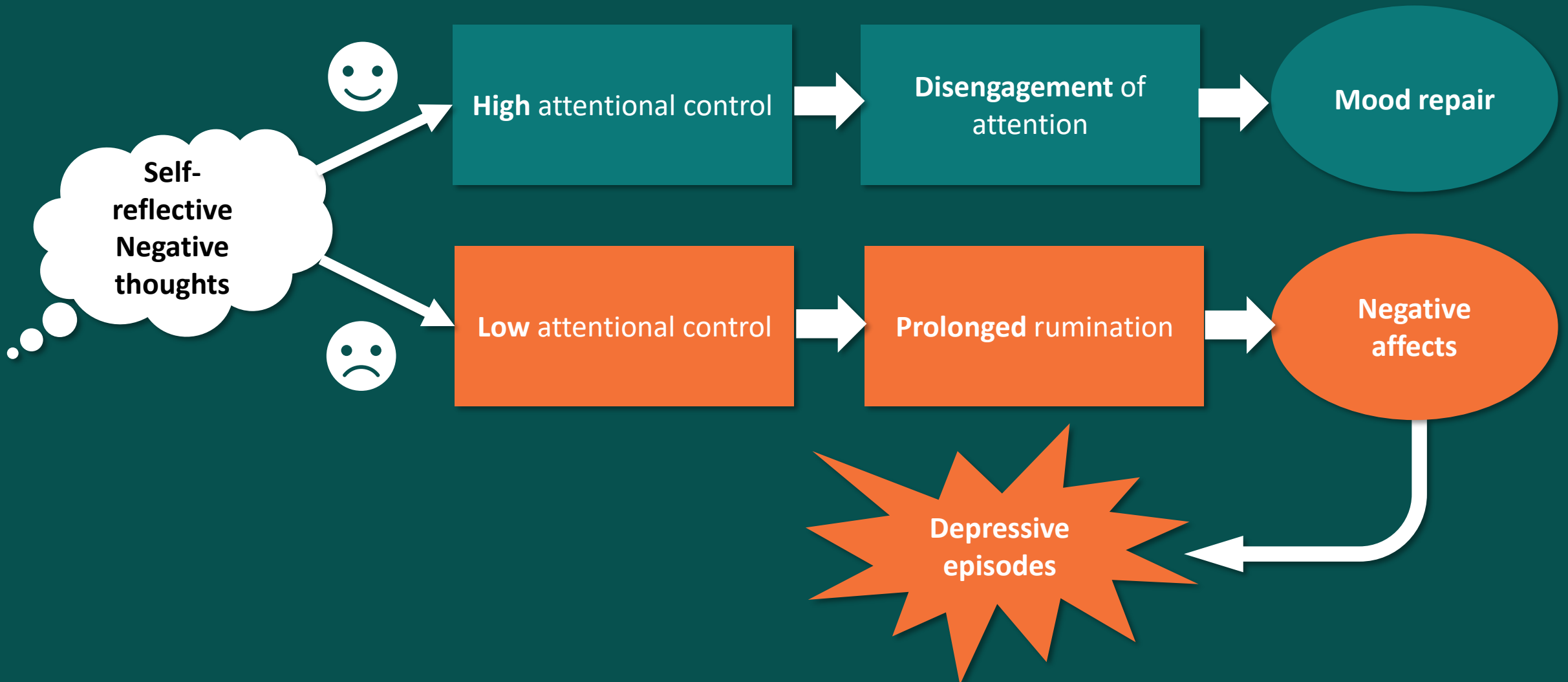
🎯 Attentional focusing

Maintain attention by **filtering out** irrelevant or distracting information

Attentional control and
rumination →
**both involved in insomnia
and depression**

INTRODUCTION

Impaired Disengagement Hypothesis (Koster et al., 2011)

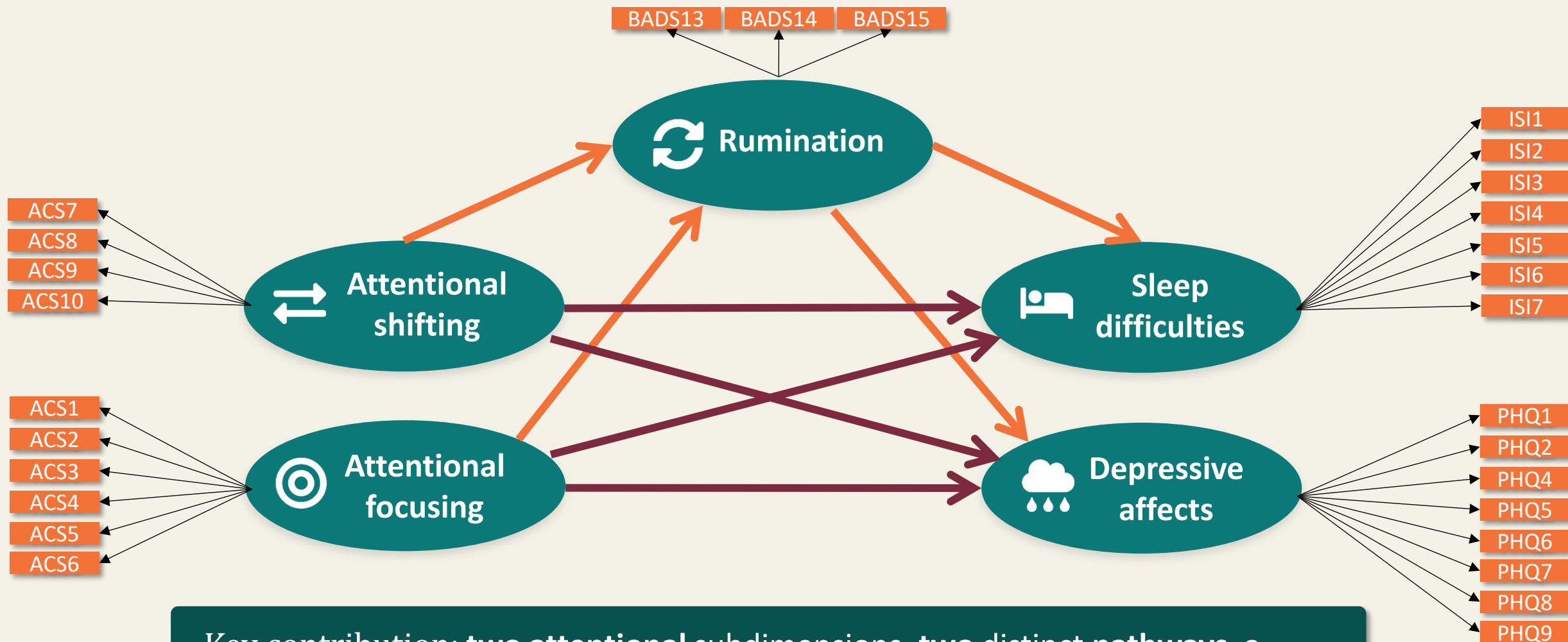


HYPOTHESIS

A partial mediation model

- Direct and indirect (via rumination) effects
- Direct effects

Covariates: age, gender, anxiety, fatigue



METHOD

Validated self-report questionnaires in French

Variable	Questionnaire
Depression	Patient Health Questionnaire
Insomnia	Insomnia Severity Index
Rumination	Behavioral Activation for Depression Scale, subscale
Focusing	Attentional Control Scale, subscale
Shifting	Attentional Control Scale, subscale



Online survey

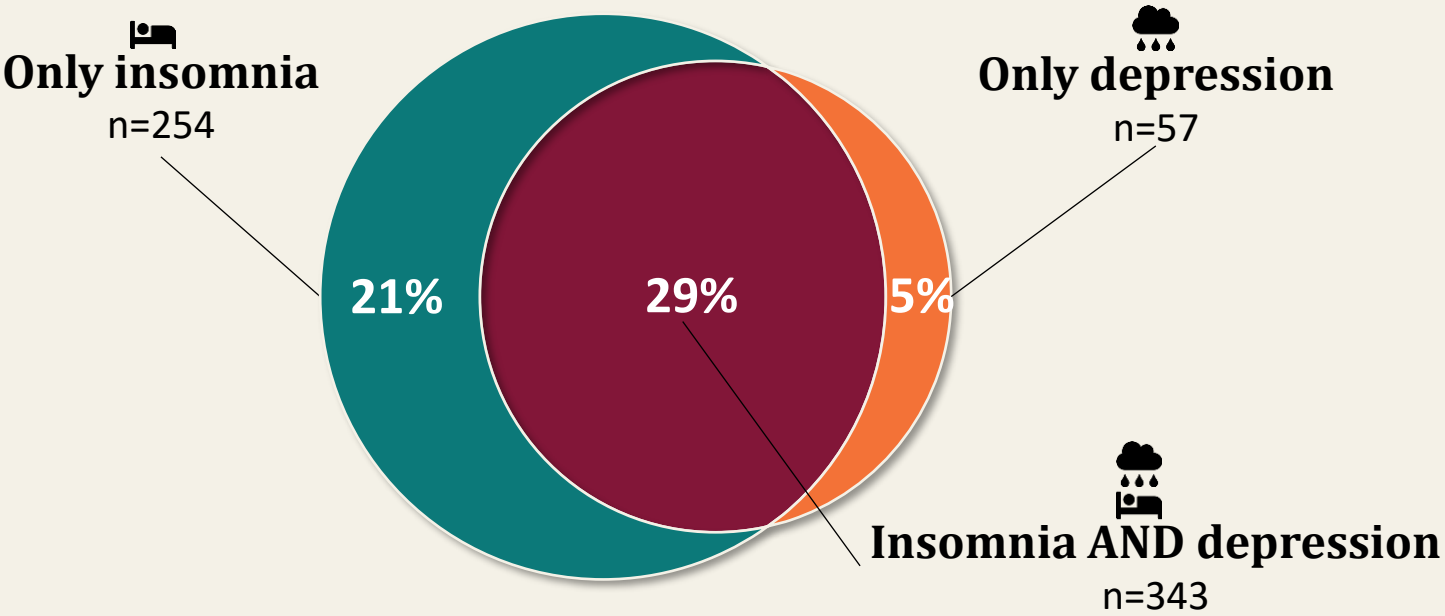
Answers based on the last 2 weeks



1195

Adults from the general population

Average age ≈ 36 years old

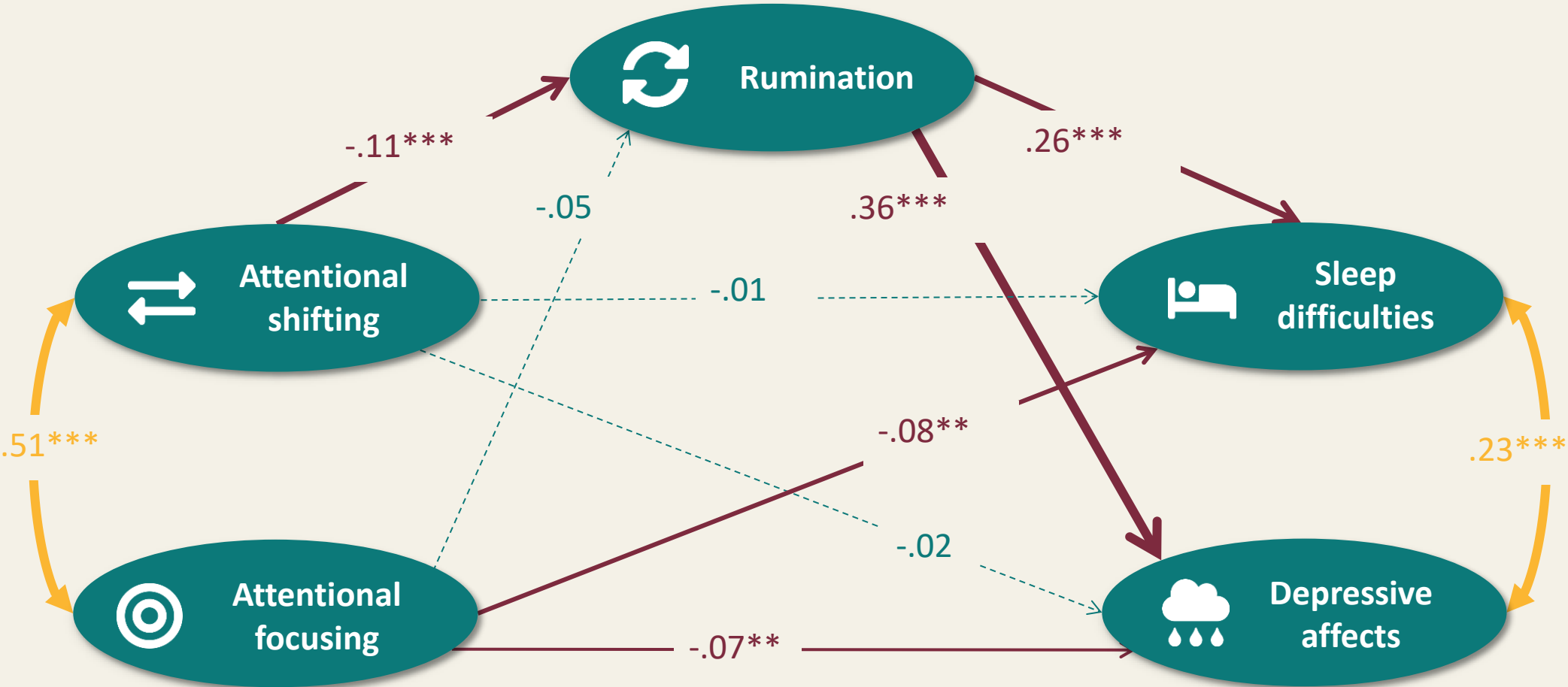


(Blekić et al., 2023; Carballeira et al., 2007; Krings et al., 2021; Micoulaud-Franchi et al., 2016; Morin, 1993)

RESULTS

SEM: direct effects

Covariates: age, gender, anxiety, fatigue



* $p < .05$; ** $p < .01$; *** $p < .001$

Solid line = significant; dashed line = not significant
The thickness of the lines indicates the strength of the effect size.

Correlations

RESULTS

SEM: direct and indirect effects

⇒ via rumination; n.s. = not significant



Attentional shifting

→ Rumination	-.11***
→ Sleep difficulties (direct)	n.s.
→ Depressive affects (direct)	n.s.
⇒ Sleep difficulties (indirect)	-.03**
⇒ Depressive affects (indirect)	-.04***



Attentional focusing

→ Rumination	n.s.
→ Sleep difficulties (direct)	-.08**
→ Depressive affects (direct)	-.07**
⇒ Sleep difficulties (indirect)	n.s.
⇒ Depressive affects (indirect)	n.s.

Variance explained

59%

Rumination

59%

Sleep difficulties

78%

Depressive affects

Model fit = acceptable

$\chi^2(673) = 3642.36, p < .001$; CFI = .913 ; TLI = .924 ;
RMSEA = .061 [.059 ; .063] ; SRMR = .050

DISCUSSION

Implications



Theoretical

- Attentional shifting and focusing → functionally **distinct** processes
- **Extends** the Impaired Disengagement Hypothesis (Koster et al., 2011), originally developed for depression, to **sleep difficulties**
- **Replicates** results from previous research, with **different samples** and **methods** (Dejong et al., 2019; Demeyer et al., 2012; Hsu et al., 2015)



Clinical

- **Rumination** is a **key process** in both sleep difficulties and depressive affects
- Different **attentional profiles**; targeting rumination might capture the contribution related to shifting
- Possible **protective effect** of a good attentional control
- Advocates for **differentiated** assessment, **personalized** interventions, and **integrated** care



Note: Likely **vicious cycle**

(Baglioni, Spiegelhalder, et al., 2011; Blairy et al., 2020; Clegg et al., 2024; Coussement & Heeren, 2022; Demeyer et al., 2012; Galbiati et al., 2019; Harvey, 2002; Heitland et al., 2020; Hoorelbeke et al., 2021; Hoorelbeke & Koster, 2017; Koster et al., 2011; Mitchell et al., 2012; Palagini et al., 2017; Snyder et al., 2015; Spielman, 1986; Takano et al., 2014; Vander Zwahlen et al., 2022, 2025; Vasey et al., 2013)

DISCUSSION

Limitations and perspectives



- **Cross-sectional design** : no causal inference
- **Self-reported measures** VS behavioral and/or physiological
- **Brief and one-dimensional measure of rumination** : 3 items ; content, valence, frequency?



- **Alternative mediators**
- **Type of insomnia** : different profiles and mechanisms?



Attentional **shifting** and **focusing** do not appear to lead to insomnia and depression through the same mechanism

Rumination is a safe bet when treating comorbid **insomnia** and **depression**



Scan to access the full preliminary study

Do you have any questions?



Let's keep in touch 😊

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