

INTÉRÊT INTÉGRATIF SOMATO-PSYCHIQUE DE LA MÉDITATION DE PLEINE CONSCIENCE

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Caf&doc'

Dijon – Centre Hospitalier La Chartreuse
18 décembre 2019

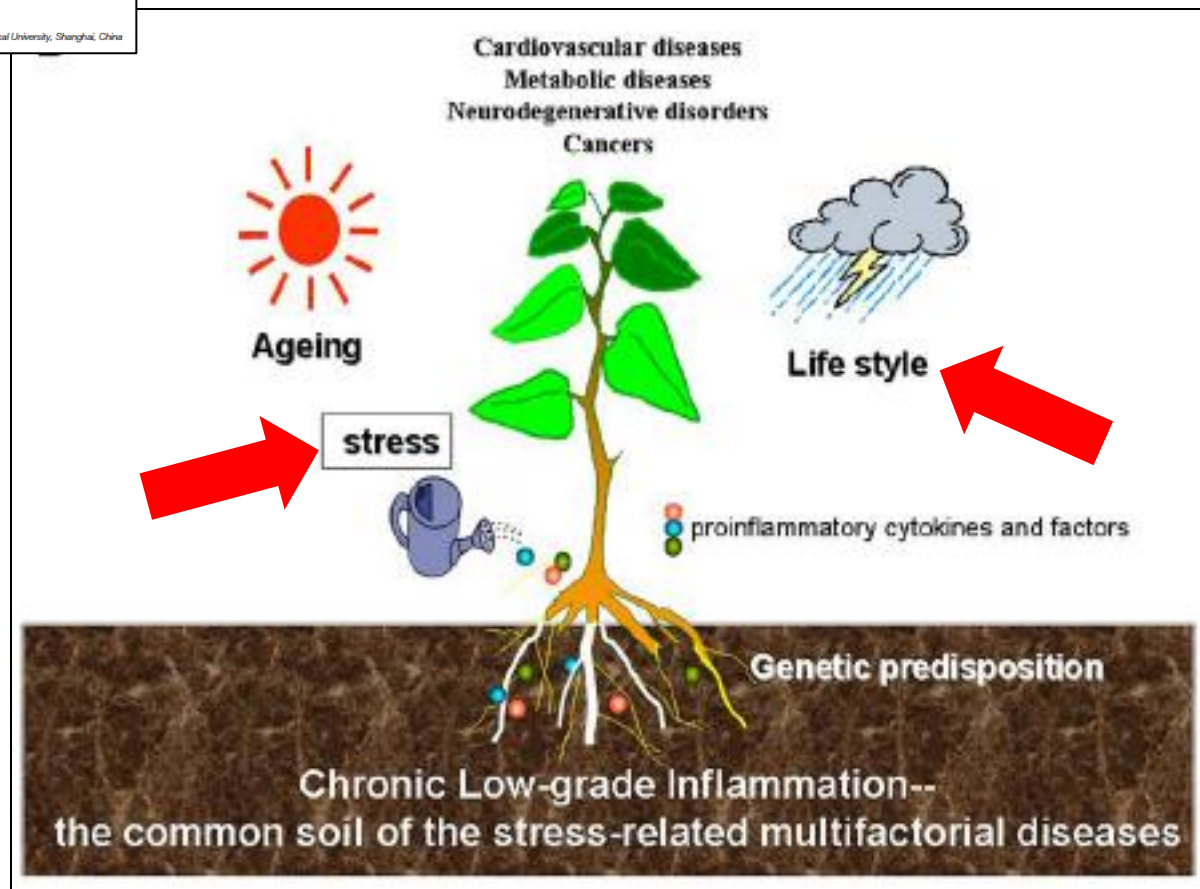
Stress et maladies du cerveau et du corps entier

Inflammation: The Common Pathway of Stress-Related Diseases

Yun-Zi Liu, Yun-Xia Wang and Chun-Lei Jiang*

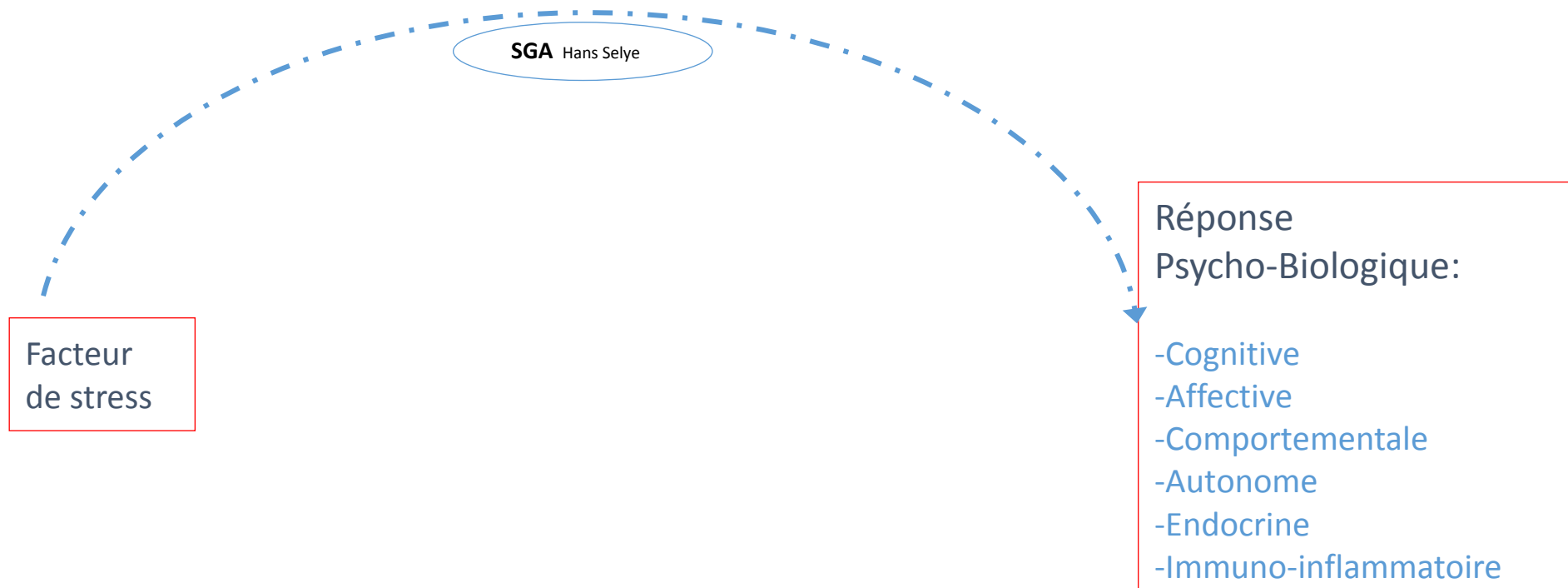
Laboratory of Stress Medicine, Faculty of Psychology and Mental Health, Second Military Medical University, Shanghai, China

Liu YZ et al. Front Hum Neurosci. 2017 ;11:316



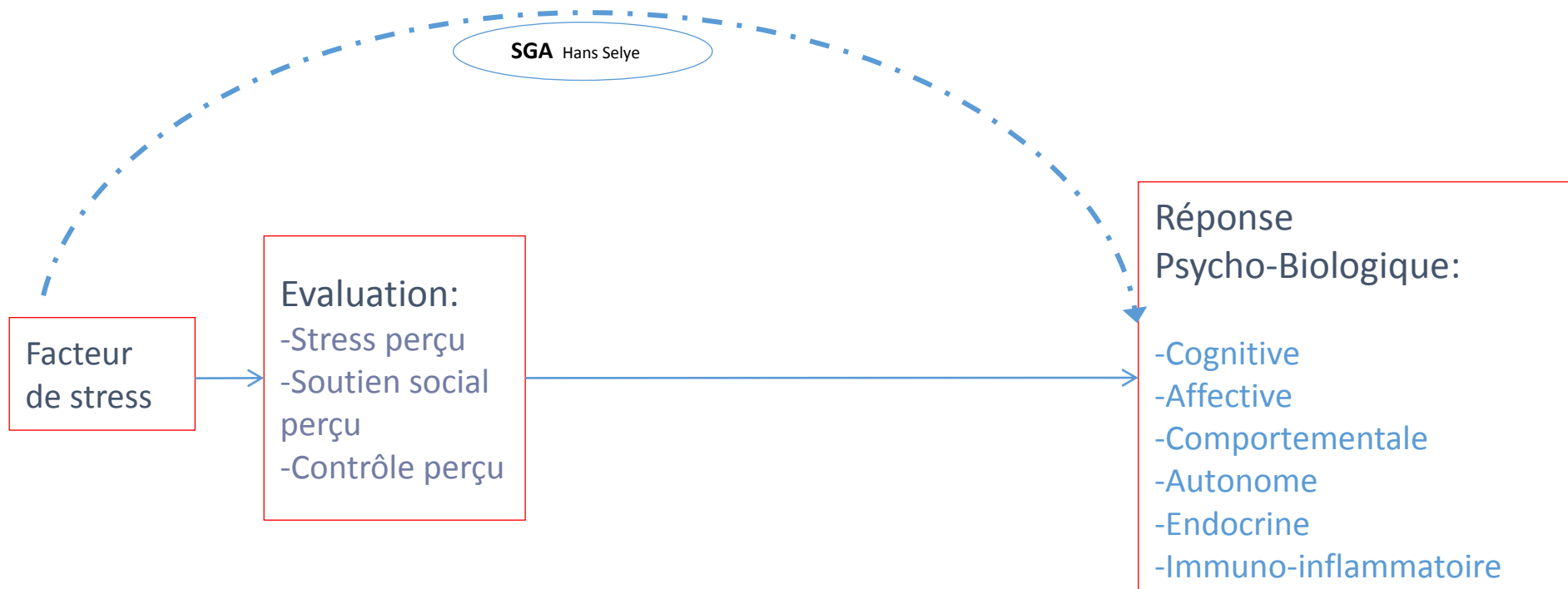
Stress, adaptation et santé

Bruchon-Schweitzer M 2002 Psychologie de la santé, Paris, Dunod



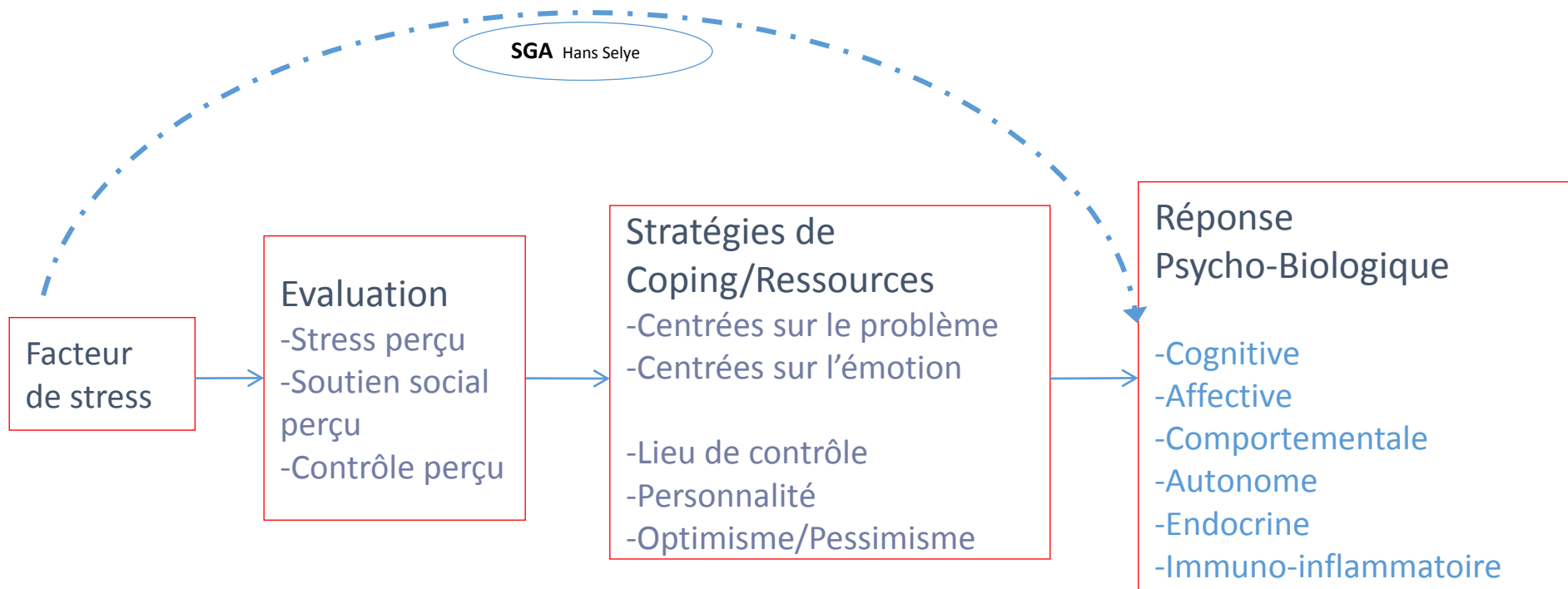
Stress, adaptation et santé

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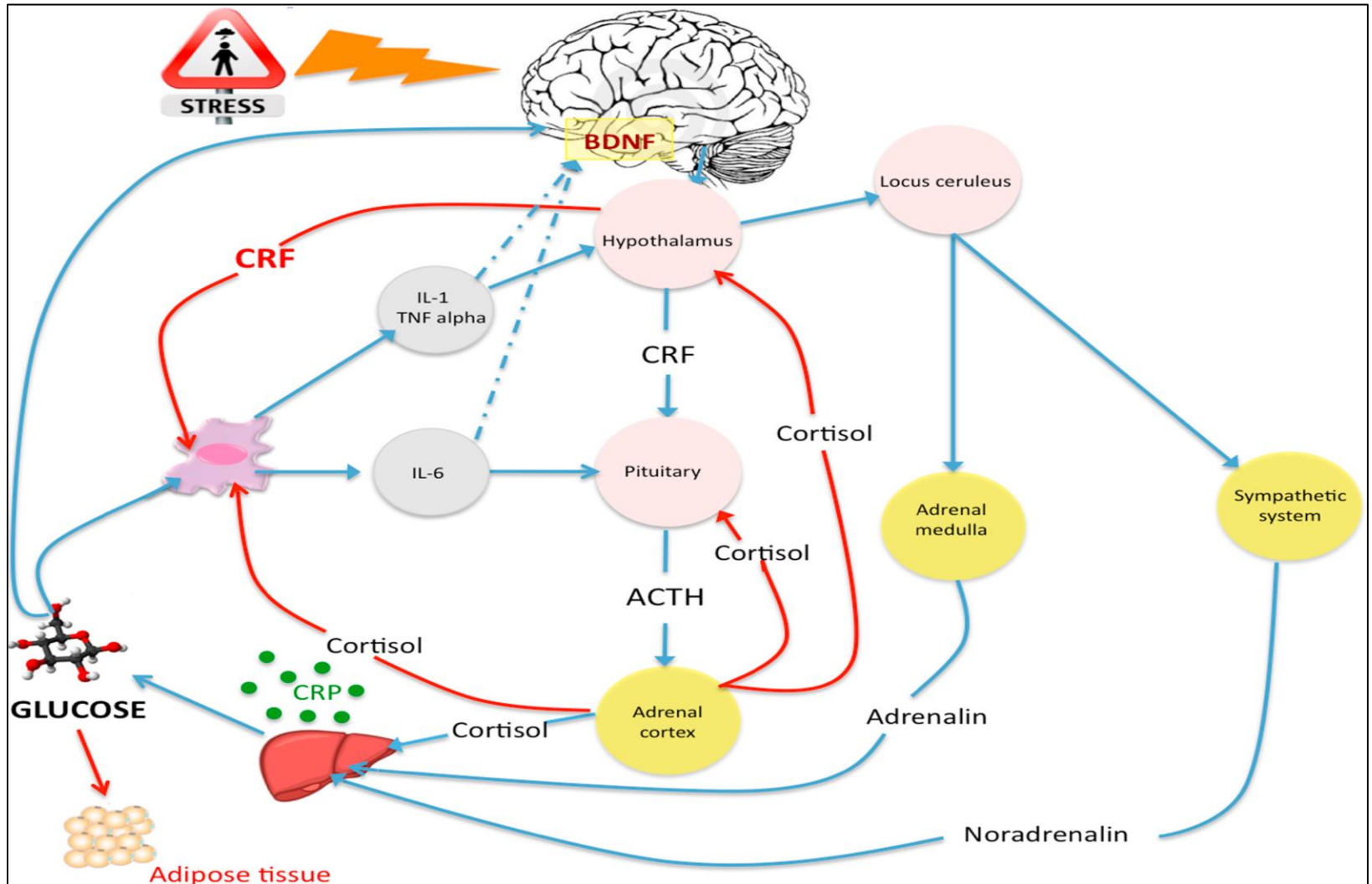


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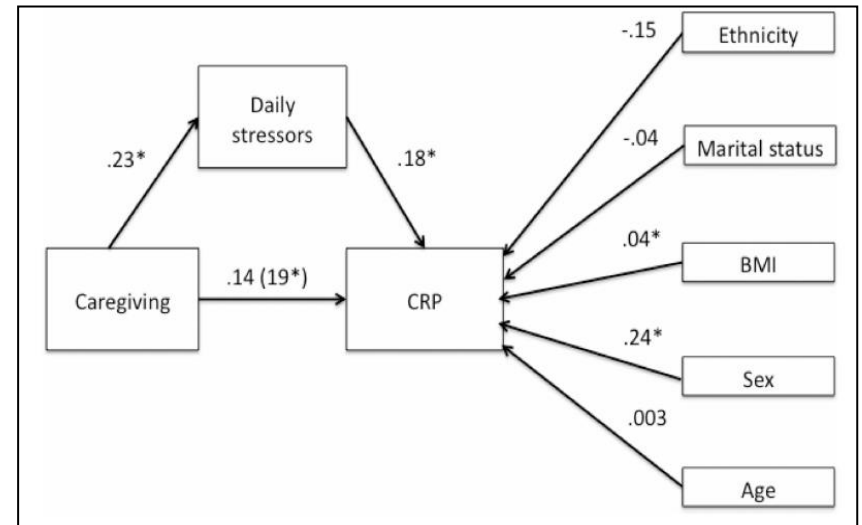
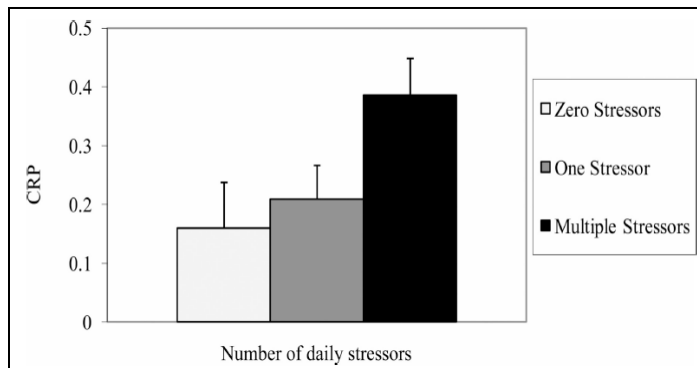
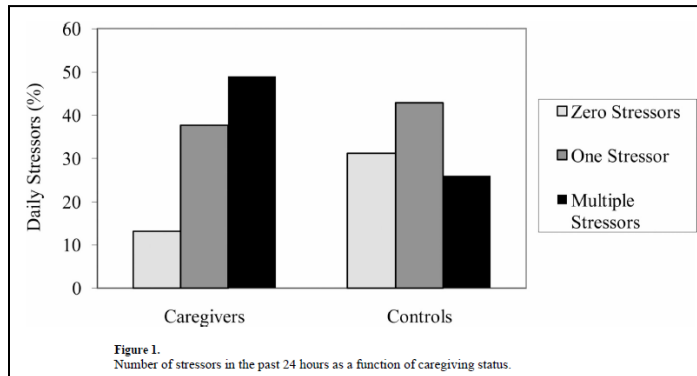
Stress, adaptation et santé



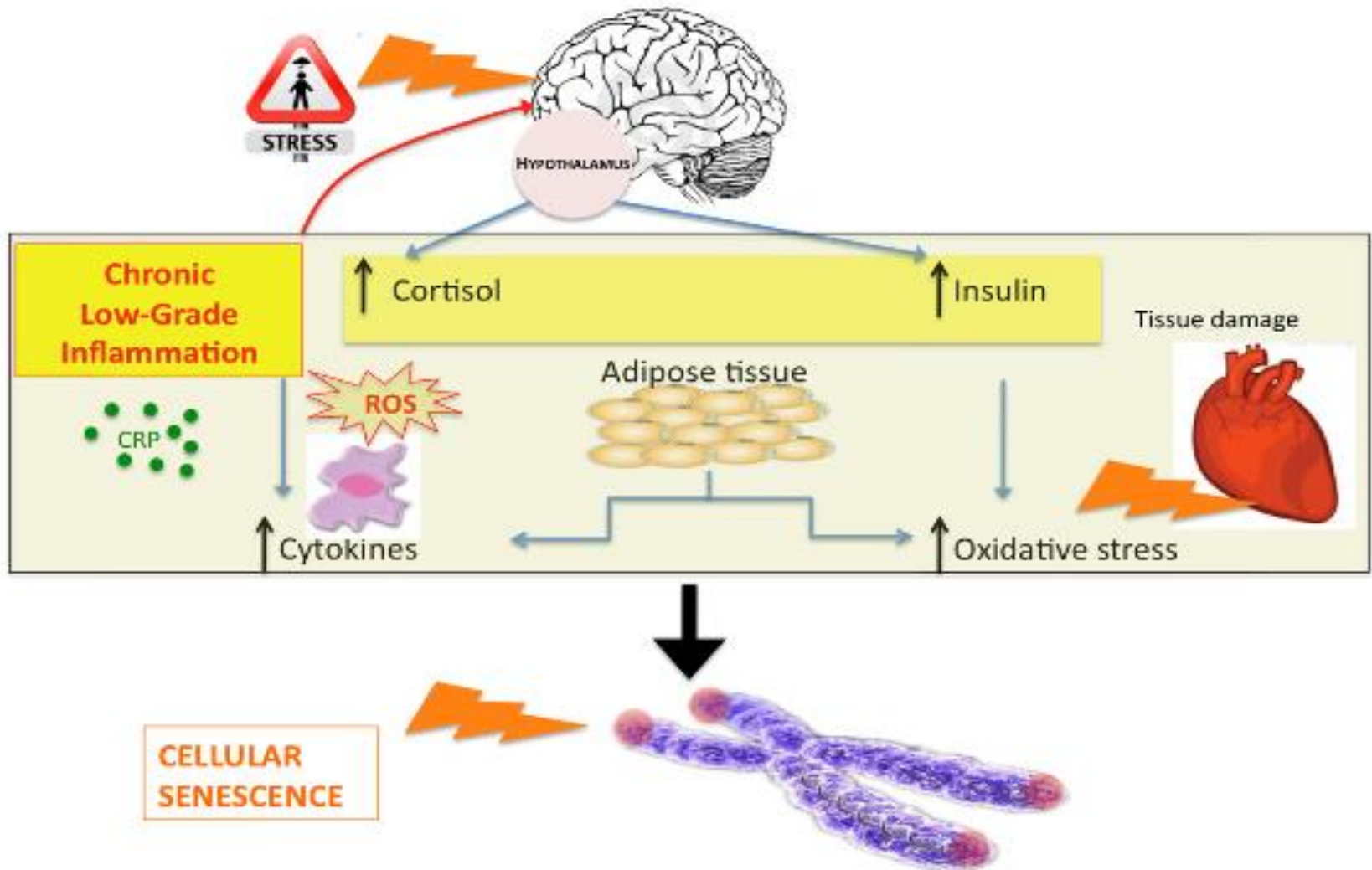
Stress, adaptation et santé

Chronic stress, daily stressors, and circulating inflammatory markers

Jean-Philippe Gouin^{a,b,*}, Ronald Glaser^{b,c,d}, William B. Malarkey^{b,c,e}, David Beversdorf^f, and Janice Kiecolt-Glaser^{a,b,g}



Stress, adaptation et santé



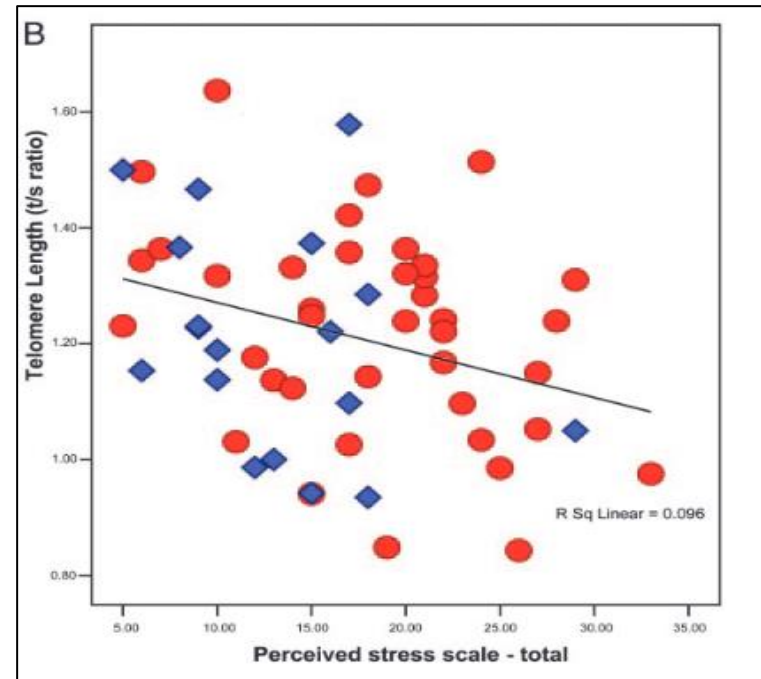
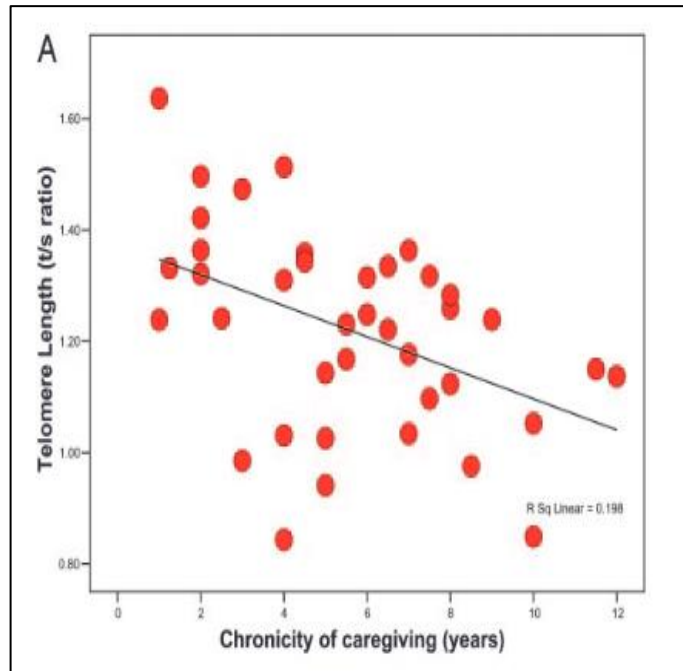
Stress, adaptation et santé

Accelerated telomere shortening in response to life stress

Elissa S. Epel^{*,†}, Elizabeth H. Blackburn[‡], Jue Lin[‡], Firdaus S. Dhabhar[§], Nancy E. Adler^{*}, Jason D. Morrow[¶], and Richard M. Cawthon^{||}



Epel ES et al. Proc Natl Acad Sci U S A. 2004 ;101(49):17312-5



Psychological Language on Twitter Predicts County-Level Heart Disease Mortality

Johannes C. Eichstaedt¹, Hansen Andrew Schwartz^{1,2}, Margaret L. Kern^{1,3}, Gregory Park¹, Darwin R. Labarthe⁴, Raina M. Merchant⁵, Sneha Jha², Megha Agrawal², Lukasz A. Dziurzynski¹, Maarten Sap¹, Christopher Weeg¹, Emily E. Larson¹, Lyle H. Ungar^{1,2}, and Martin E. P. Seligman¹

SGA Hans Selye

Evaluation

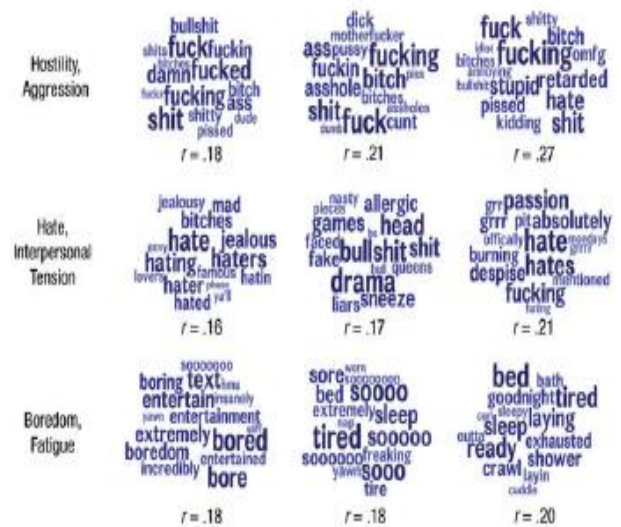
- Stress perçu
- Soutien social perçu
- Contrôle perçu

Stratégies de Coping/Ressources

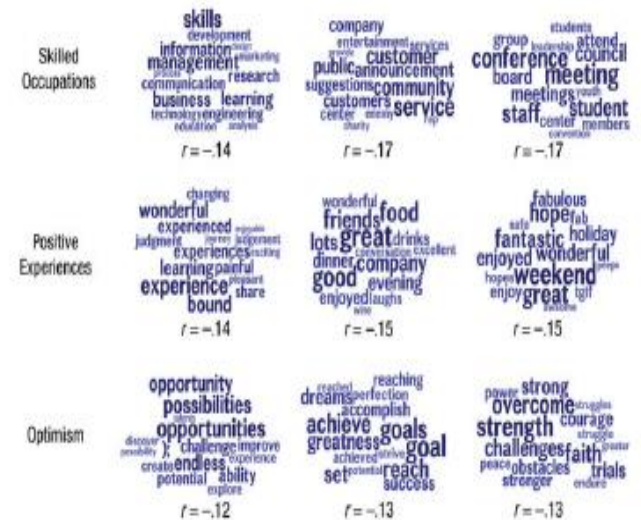
- Affectivité +/-
- Optimisme/Pessimisme
- Lieu de contrôle
- Personnalité

Eichstaedt JC et al. Psychol Sci. 2015;26(2):159-69.

Twitter Topics Positively Correlated With County-Level AHD Mortality



Twitter Topics Negatively Correlated With County-Level AHD Mortality



Psychological Language on Twitter Predicts County-Level Heart Disease Mortality

Johannes C. Eichstaedt¹, Hansen Andrew Schwartz^{1,2}, Margaret L. Kern^{1,3}, Gregory Park¹, Darwin R. Labarthe⁴, Raina M. Merchant⁵, Sneha Jha², Megha Agrawal², Lukasz A. Dziurzynski¹, Maarten Sap¹, Christopher Weeg¹, Emily E. Larson¹, Lyle H. Ungar^{1,2}, and Martin E. P. Seligman¹

SGA Hans Selye

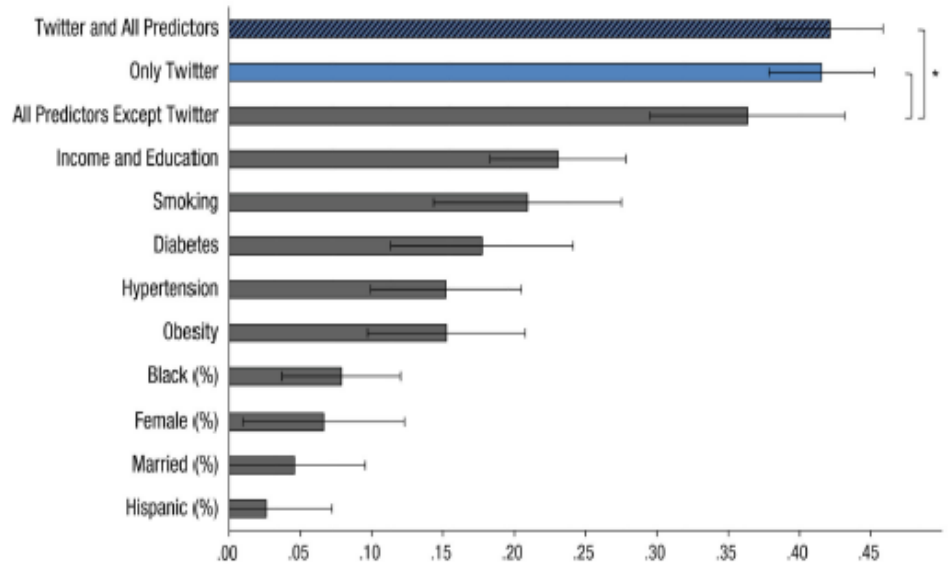


Fig. 2. Performance of models predicting age-adjusted mortality from atherosclerotic heart disease

Facteur de stress

Evaluation

- Stress perçu
- Soutien social perçu
- Contrôle perçu

Stratégies de Coping/Ressources

- Affectivité +/-**
- Optimisme/Pessimisme
- Lieu de contrôle
- Personnalité

Réponse Psycho-Biologique

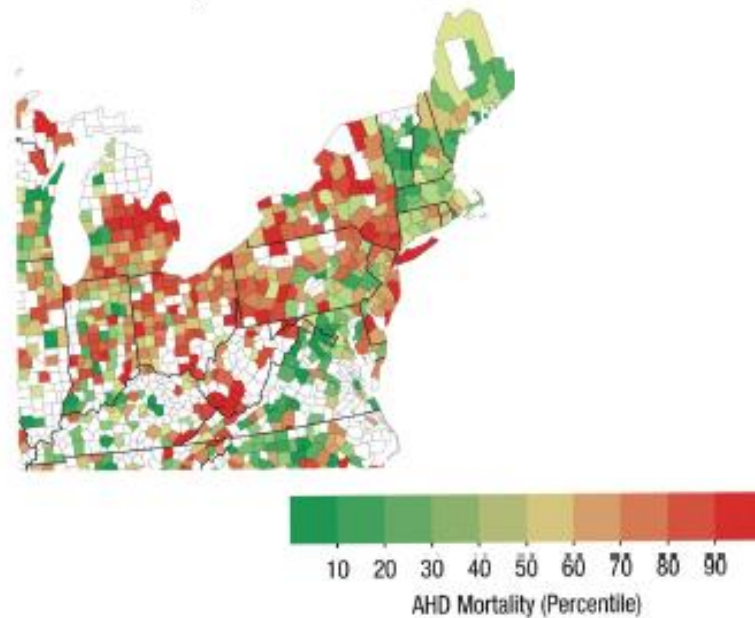
- Cognitive
- Affective
- Comportementale
- Autonome
- Endocrine
- Immuno-inflammatoire

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SGA Hans Selye

CDC-Reported AHD Mortality



Facteur de stress

Evaluation

- Stress perçu
- Soutien social perçu
- Contrôle perçu

Stratégies de Coping/Ressources

- Affectivité +/-**
- Optimisme/Pessimisme
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- Personnalité

Réponse Psycho-Biologique

- Cognitive
- Affective
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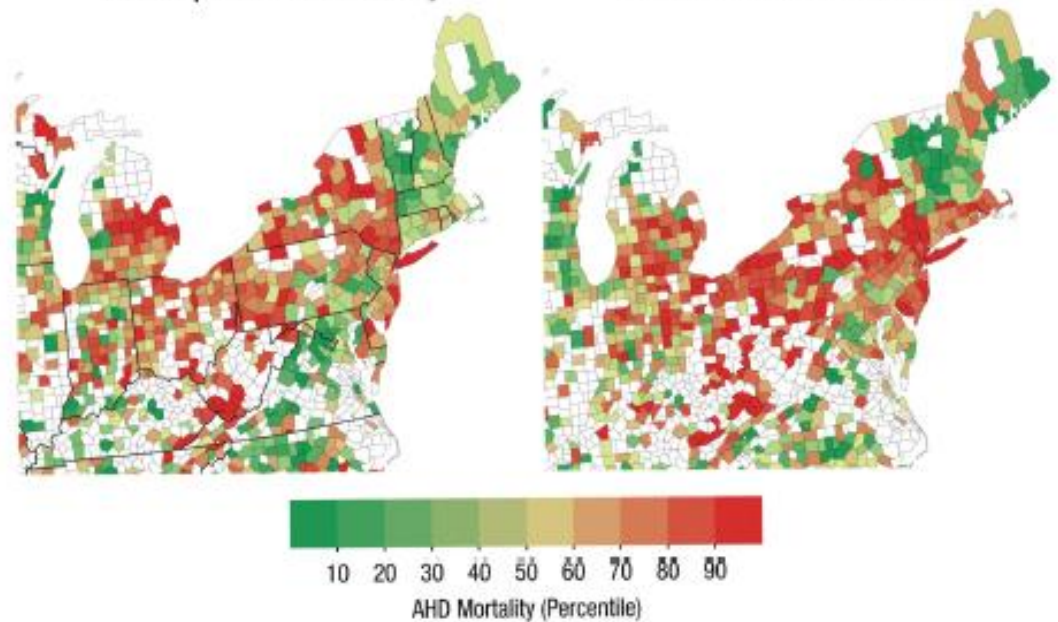
Psychological Language on Twitter Predicts County-Level Heart Disease Mortality

Johannes C. Eichstaedt¹, Hansen Andrew Schwartz^{1,2}, Margaret L. Kern^{1,3}, Gregory Park¹, Darwin R. Labarthe⁴, Raina M. Merchant⁵, Sneha Jha², Megha Agrawal², Lukasz A. Dziurzynski¹, Maarten Sap¹, Christopher Weeg¹, Emily E. Larson¹, Lyle H. Ungar^{1,2}, and Martin E. P. Seligman¹

SGA Hans Selye

CDC-Reported AHD Mortality

Twitter-Predicted AHD Mortality



Facteur
de stress

Evaluation

- Stress perçu
- Soutien social perçu
- Contrôle perçu

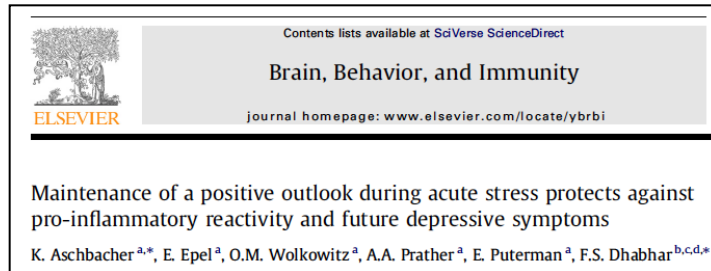
Stratégies de Coping/Ressources

- Affectivité +/-**
- Optimisme/Pessimisme
- Lieu de contrôle
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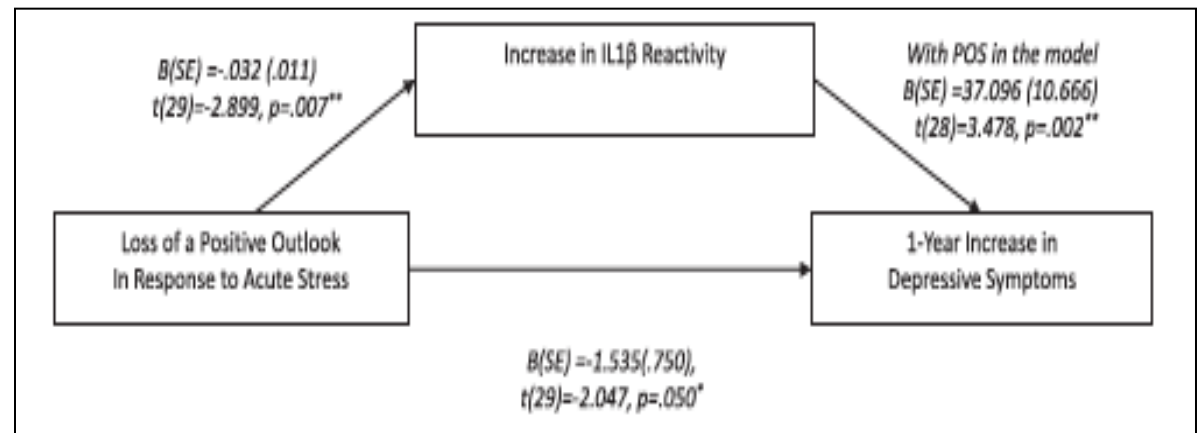
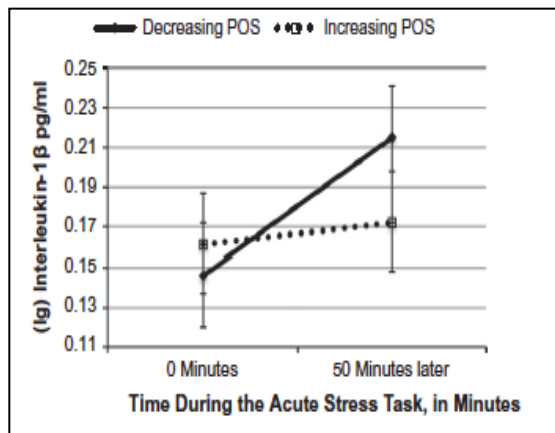
Réponse Psycho-Biologique

- Cognitive
- Affective
- Comportementale
- Autonome
- Endocrine
- Immuno-inflammatoire

Stress, inflammation et psychologie positive

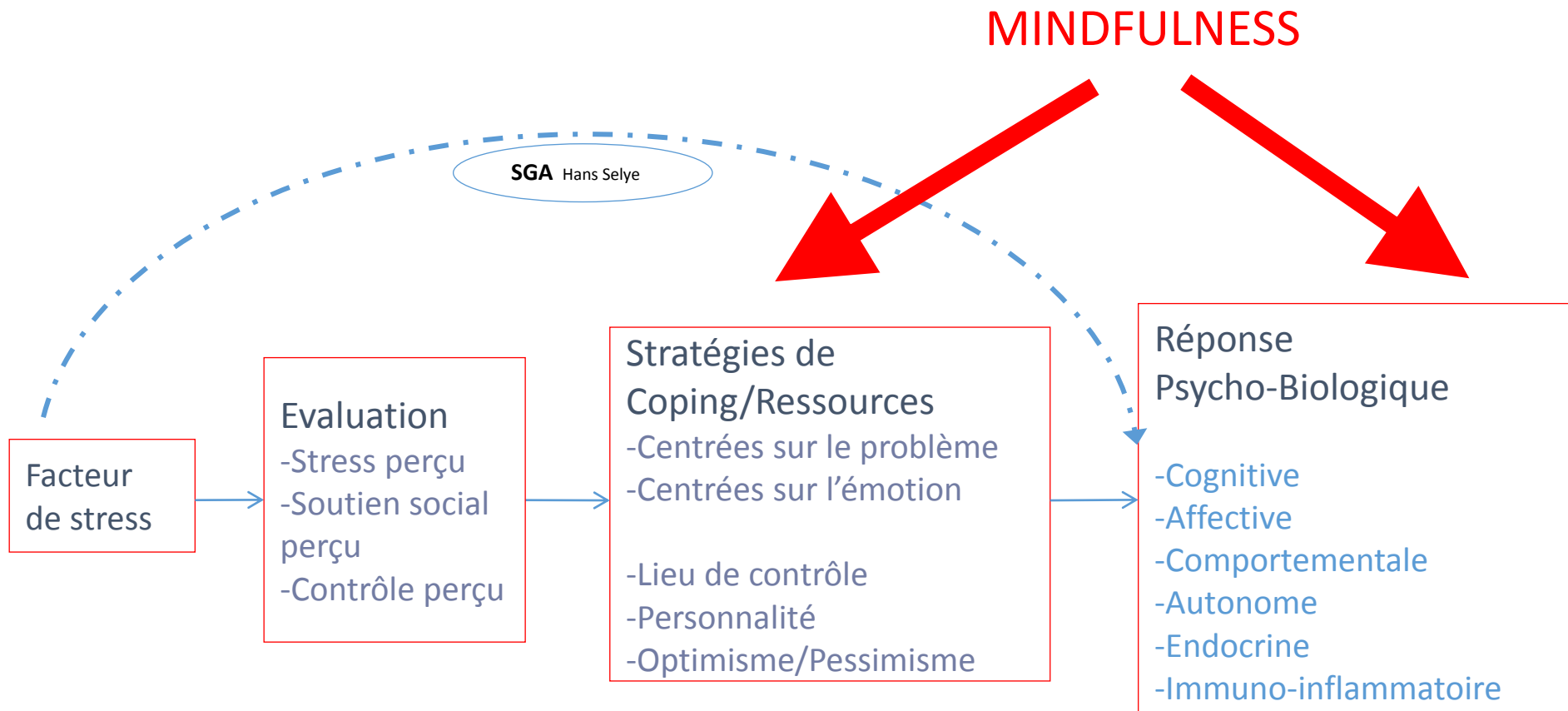


Aschbacher K et al. Brain Behav Immun. 2012 ;26(2):346-52.



data raise the possibility that individuals who maintain hope, challenge and confidence during stress may be at lower risk for future depressive symptoms.

Stress, adaptation et santé



Mindfulness

- Se familiariser avec nos réactions de stress
 - Prendre conscience de notre réactivité automatique
 - Remplacer

Stress ⇒ **Réaction**
par

Stress | pause favorisant la prise de conscience | **Réponse**

La pleine conscience implique deux composantes

Une attention particulière

Maintenir volontairement
l'attention sur un élément donné

P. ex. **la respiration**, les sensations corporelles, ce que la personne voit, sent, entend, goûte...

... mais aussi les pensées et les images mentales qui surgissent spontanément dans le champ de la conscience

et sans jugement

Pendant la pratique, on cherche à prendre conscience de toutes les facettes de notre état actuel, qu'elles soient positives ou négatives

Développement des interventions basées sur la pleine conscience

Réduction du stress basé sur la PC (1982)

J. Kabat-Zinn



Teasdale, Segal & Williams

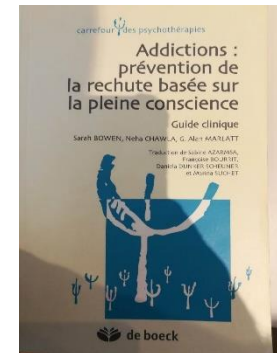


(1995) Thérapie cognitive basée sur la PC pour la prévention des rechutes dépressives



MBRP
Prévention des rechutes dans les addictions (2009)

A. Marlatt

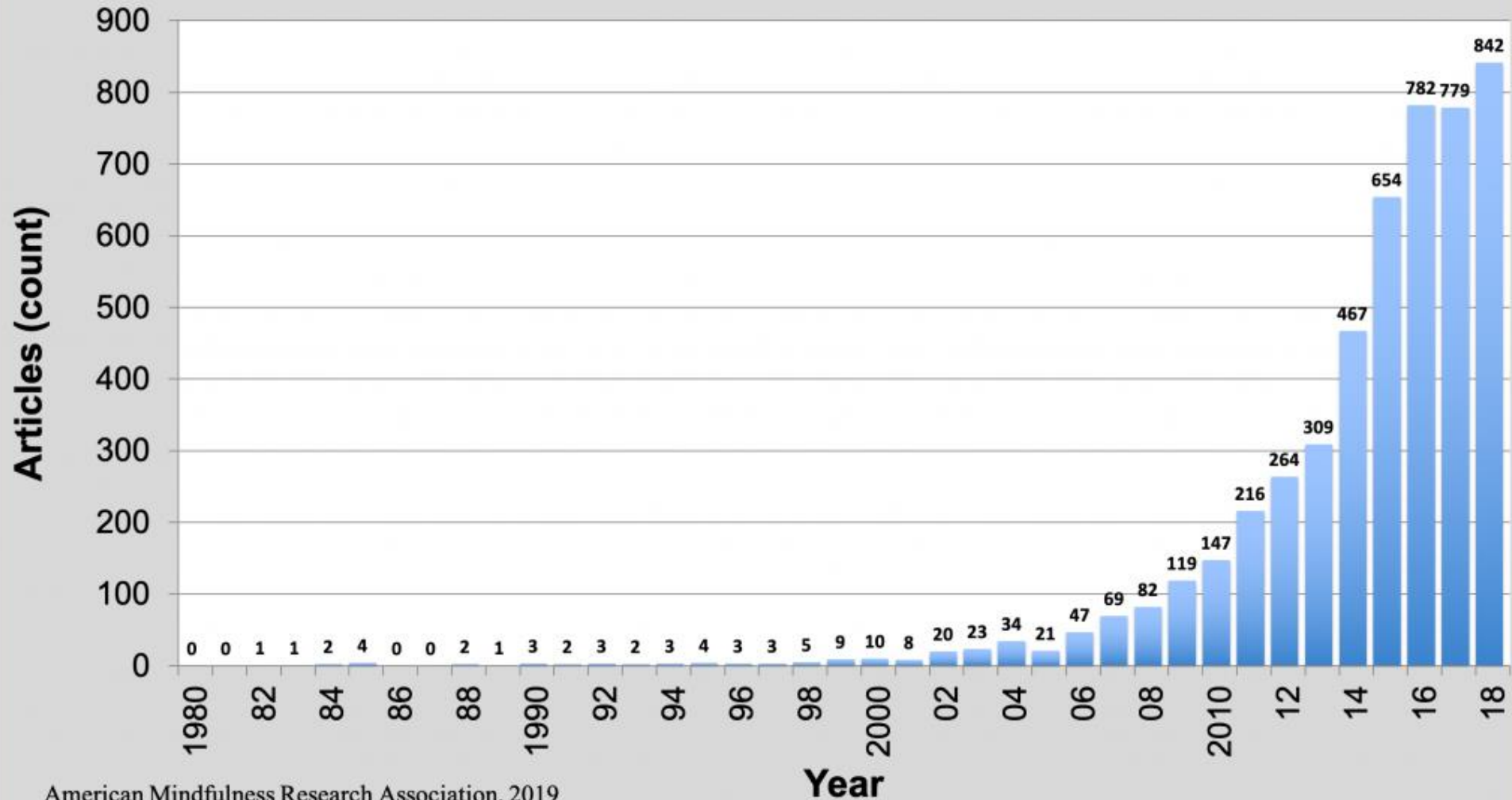


→ Populations Spécifiques

- MB EAT
- MB approach for seniors (8 mois)
- MB Cancer Recovery
- MB Childbirth and Parenting

...etc...

Interventions basées sur la pleine conscience



American Mindfulness Research Association, 2019
Source: goAMRA.org

Mindfulness (MBSR)

Programme de réduction du stress basé sur la pleine conscience

- Réduction significative de l'intensité des symptômes :
 - Dépressifs (taille d'effet 0,97)
 - **Anxieux / Stress** (taille d'effet 0,95)

Song et al, 2014 ; Int J Nurs Sci

Abbott et al, 2014 ; J Psychosom Res

Reilly et al, 2014 ; Health Psychol Rev

Aucoin et al, 2014 ; Complem and Alternat Medicine

Hilton et al, 2016 ; Annals of Behavioral Medicine

Hofmann et al, 2010 ; J of Consult and Clin Psychology

Fjorback et al, 2011 ; Acta Psychiatr Scandinavica

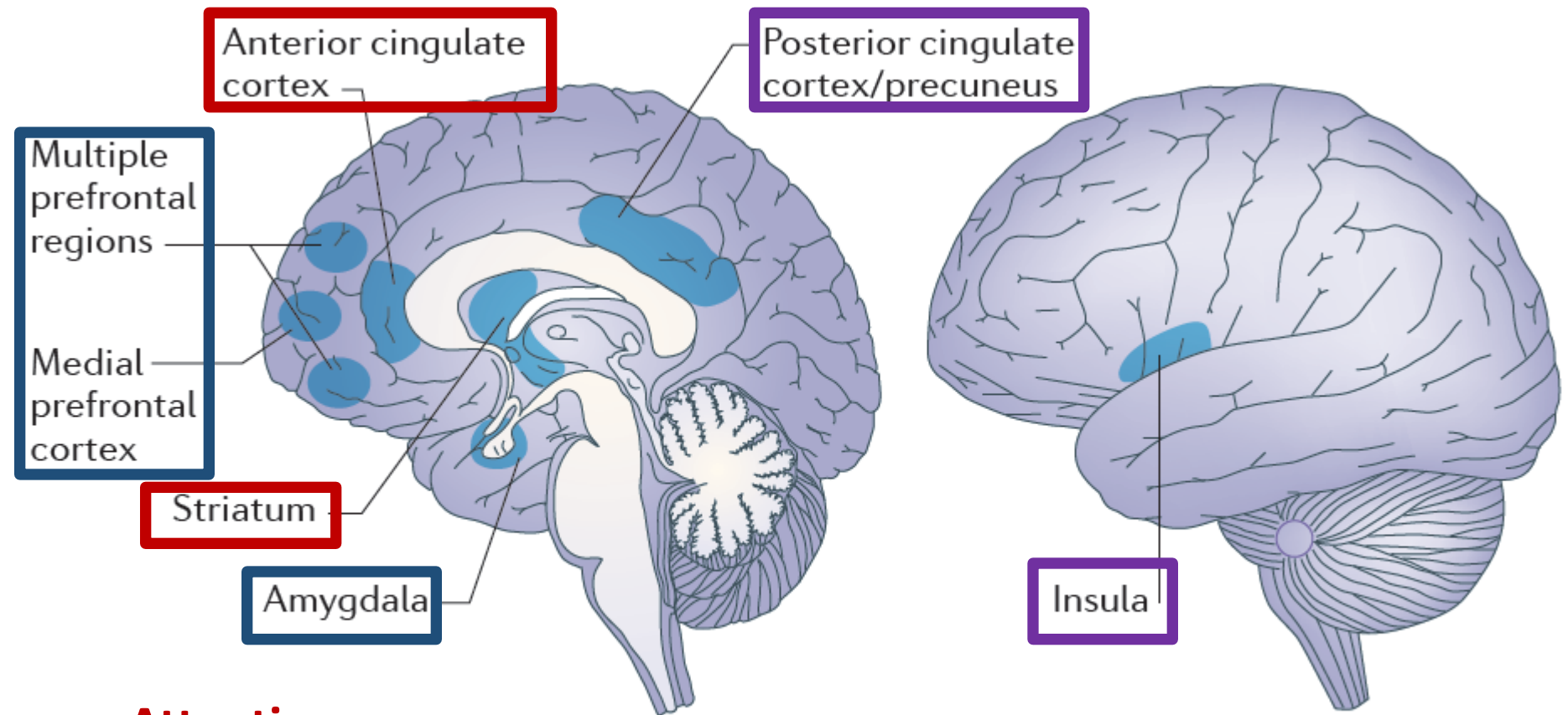
McCoon et al, 2011: Behaviour Research and Therapy

Chen et al, 2012 ; Dep Anxiety

Khoury et al, 2013 : Clin Psychol Review

Simpson et al, 2014 ; BMC Neurology

Les régions du cerveau impliquées dans les 3 composantes fondamentales de la méditation de pleine conscience



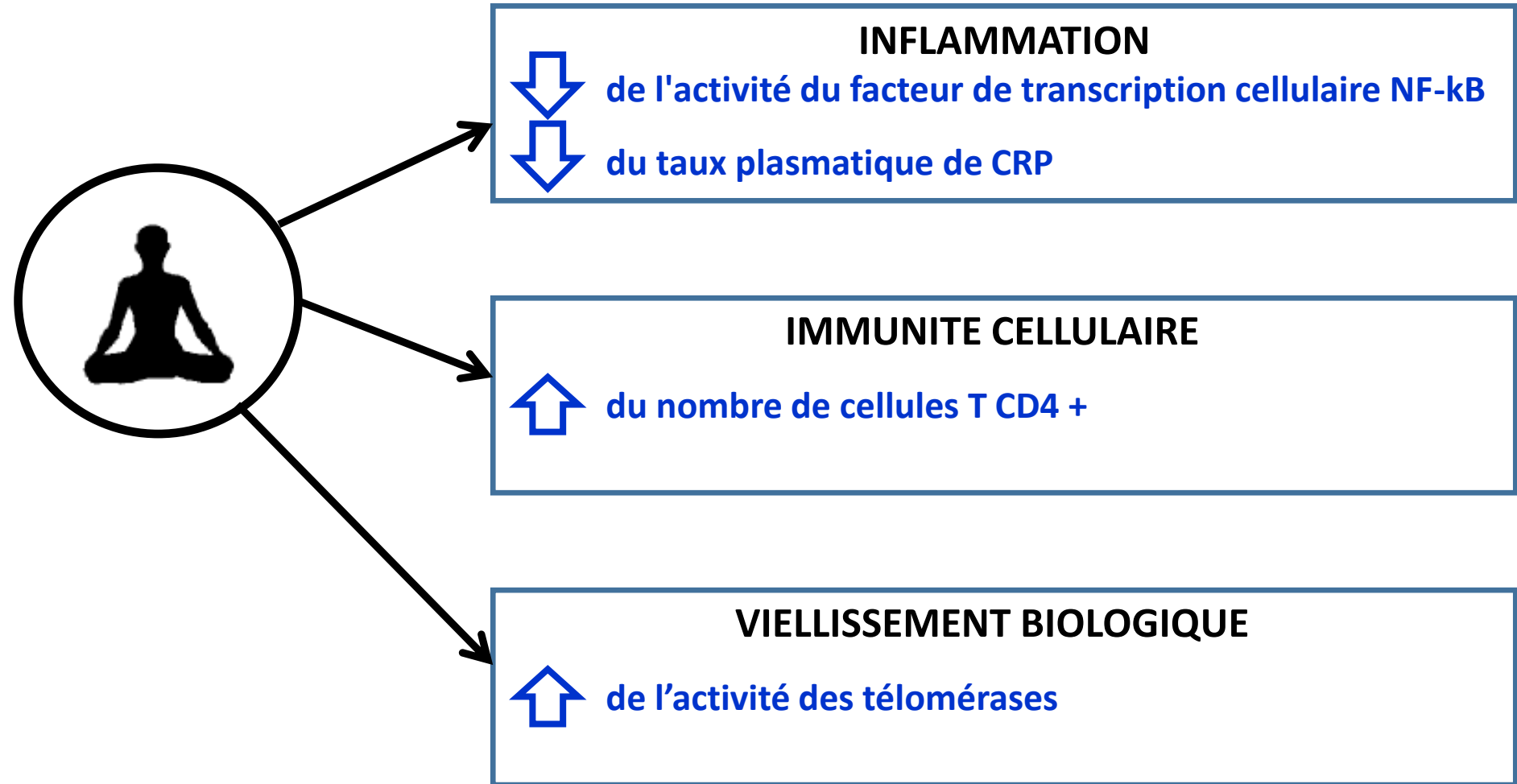
- **Attention**
- **Régulation émotionnelle**

- **Conscience de soi et du corps**

Sperduti et al, 2012; Conscious. Cogn. ; 21 : 269 - 276

Tang et al, 2015; Nature Review Neuroscience ; 16 : 213 - 225

Données sur les marqueurs inflammatoires & vieillissement cellulaire



Marqueurs du stress et mindfulness



Contents lists available at ScienceDirect

Journal of Psychiatric Research

journal homepage: www.elsevier.com/locate/psychires



Mindfulness mediates the physiological markers of stress: Systematic review and meta-analysis

Michaela C. Pascoe ^{a,*}, David R. Thompson ^{c,d}, Zoe M. Jenkins ^b, Chantal F. Ski ^{b,c}

^a Department of Cancer Experiences, Peter MacCallum Cancer Centre, Melbourne, VIC 3000, Australia
^b Mental Health Service, St. Vincent's Hospital, Melbourne, VIC 3005, Australia
^c Department of Psychiatry, University of Melbourne, Melbourne, VIC 3010, Australia
^d Department of Epidemiology and Preventive Medicine, Monash University, Melbourne, VIC 3000, Australia

Pascoe MC et al. J Psychiatr Res. 2017 ;95:156-178.

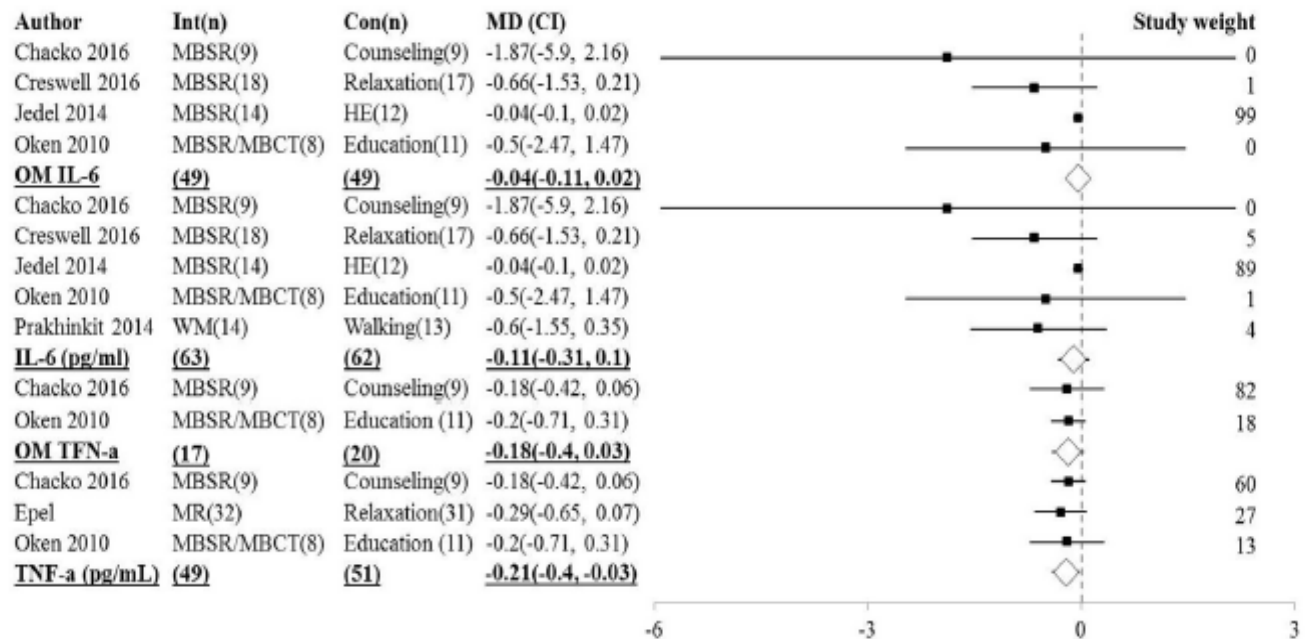


Fig. 4. Forest plot of meditation interventions on interleukin-6 and tumour necrosis factor-alpha. Con = Control group; HE = health education; IL-6 = Interleukin 6; Int = Intervention; MBCT = Mindfulness based cognitive therapy; MBSR = Mindfulness based stress reduction; MR = Meditation retreat; OM=Open Monitoring; TNF- α = Tumour necrosis factor alpha.

Marqueurs du stress et mindfulness



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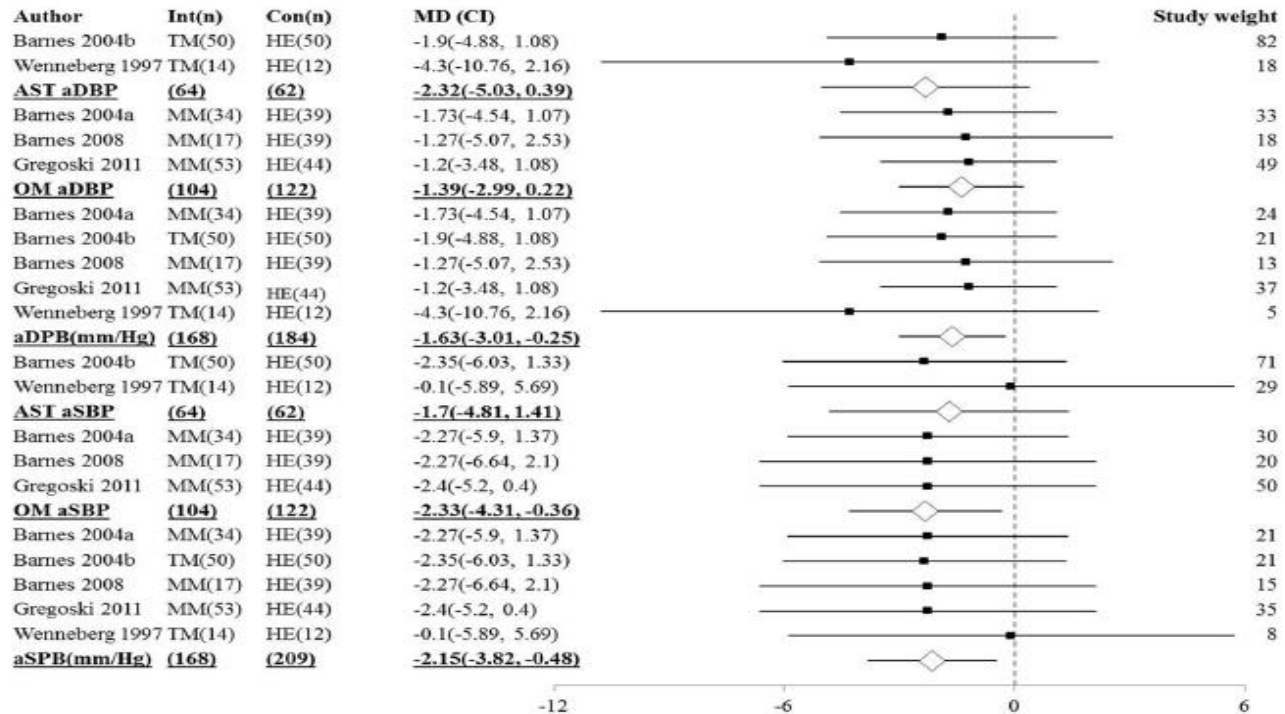


Fig. 7. Forest plot of meditation interventions on ambulatory blood pressure. a = ambulatory; AST = Automatic self-transcending; BAM=Breathing awareness meditation; BLS=Botvin LifeSkills Training; Con = Control group; HE = health education; Int = Intervention; MM = Mindfulness meditation; Mm/Hg = Millimetres of Mercury; OM=Open monitoring; SE=Stress education; SMD=Standardised mean difference; st = Stress test; TM = Transcendental meditation.

Marqueurs du stress et mindfulness



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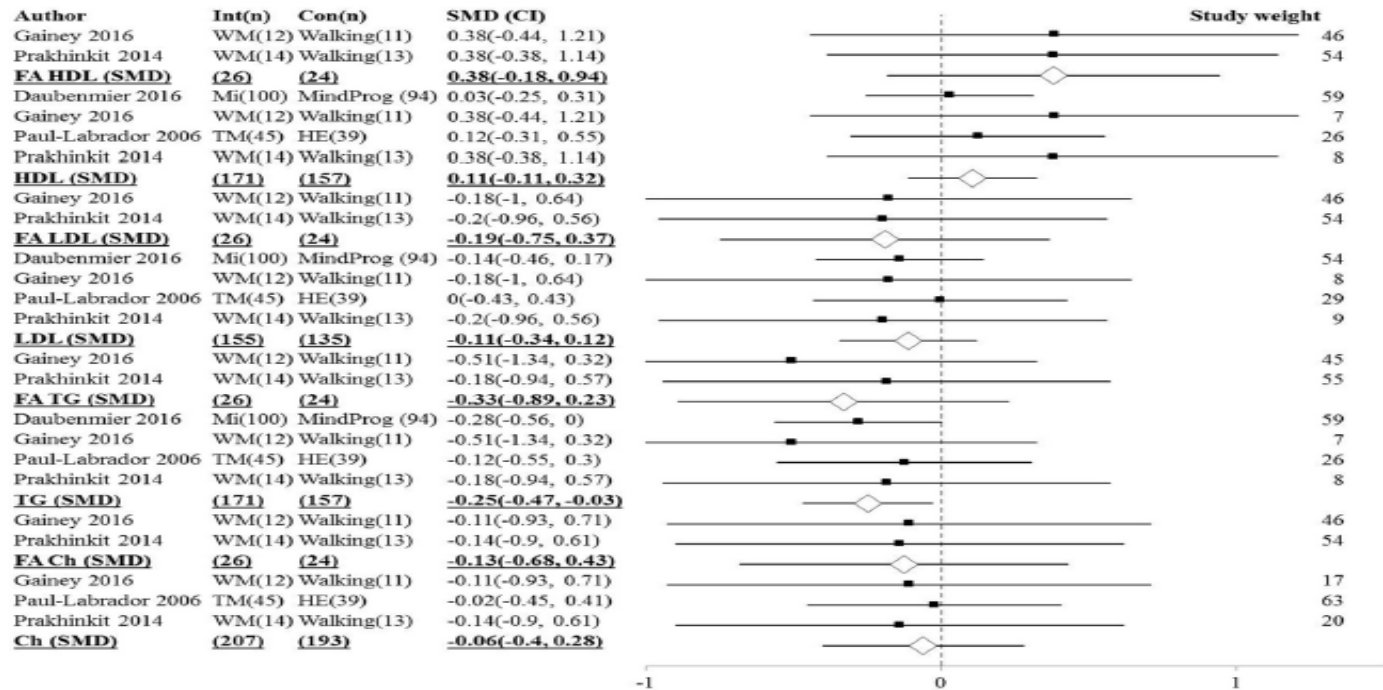


Fig 9. Forest plot of meditation interventions on lipids. Ch = Cholesterol; Con = control; FA=Focused attention; HE = health education; HDL=High density lipoprotein; Int = Intervention; L = Learning; LDL = Low density lipoprotein; MindProg = Mindfulness program with Education, cognitive behavioural therapy, progressive muscle relaxation and social support; Mi = Mindfulness; MM = Mindfulness meditation; Mo=Mountain meditation; SMD = standardised mean difference; PF=Physical training; Re=Reading; TC = Thich; TG = Triglycerides; TM = Transcendental meditation; WM=Walking meditation.

Mindfulness, perturbations métaboliques et dépression



Article

Mindfulness Is Associated with the Metabolic Syndrome among Individuals with a Depressive Symptomatology

Erika Guyot ^{1,*}, Julia Baudry ¹, Serge Hercberg ^{1,2,3}, Pilar Galan ¹, Emmanuelle Kesse-Guyot ¹ and Sandrine Péneau ¹

Guyot E et al. *Nutrients*. 2018 ;10(2).

Table 2. Multivariable logistic regression models between mindfulness ¹ and its subscales ¹ and the Metabolic Syndrome according to depressive symptomatology in 17,490 individuals (NutriNet-Santé study, France, 2011–2014).

	Models	No Depressive Symptomatology <i>n</i> = 14,760		Depressive Symptomatology <i>n</i> = 2730	
		OR (95% CI)	<i>p</i>	OR (95% CI)	<i>p</i>
Overall Mindfulness	Model 1 ²	0.96 (0.84–1.09)	0.51	0.71 (0.56–0.91)	0.0072
	Model 2 ³	1.01 (0.88–1.15)	0.92	0.72 (0.56–0.92)	0.0096
	Model 3 ⁴	1.02 (0.89–1.16)	0.82	0.73 (0.57–0.93)	0.012
Acting with awareness	Model 1 ²	1.02 (0.94–1.10)	0.68	0.89 (0.77–1.03)	0.13
	Model 2 ³	1.04 (0.96–1.13)	0.33	0.90 (0.78–1.05)	0.17
	Model 3 ⁴	1.04 (0.96–1.13)	0.32	0.91 (0.78–1.05)	0.20
Describing	Model 1 ²	0.99 (0.92–1.07)	0.82	0.91 (0.80–1.05)	0.19
	Model 2 ³	1.01 (0.94–1.08)	0.84	0.91 (0.80–1.05)	0.19
	Model 3 ⁴	1.01 (0.94–1.09)	0.78	0.91 (0.80–1.05)	0.20
Observing	Model 1 ²	0.92 (0.85–0.99)	0.030	0.90 (0.76–1.06)	0.20
	Model 2 ³	0.95 (0.88–1.03)	0.19	0.90 (0.76–1.07)	0.24
	Model 3 ⁴	0.95 (0.89–1.04)	0.27	0.91 (0.77–1.07)	0.26
Non-judging	Model 1 ²	1.01 (0.94–1.09)	0.71	0.86 (0.75–0.99)	0.039
	Model 2 ³	1.01 (0.94–1.09)	0.74	0.86 (0.75–0.99)	0.037
	Model 3 ⁴	1.01 (0.94–1.09)	0.75	0.86 (0.75–0.99)	0.040
Non-reactivity	Model 1 ²	0.98 (0.89–1.07)	0.61	0.75 (0.63–0.92)	0.0040
	Model 2 ³	1.00 (0.91–1.10)	0.99	0.77 (0.64–0.93)	0.0063
	Model 3 ⁴	1.00 (0.91–1.10)	0.93	0.77 (0.64–0.94)	0.0081

Abbreviations: OR, Odds Ratio; 95% CI, 95% Confidence Interval; ¹ Values ranged from 0 to 5 (higher scores indicated a greater mindfulness); ² Model 1: adjusted for age, sex, education level, and familial status; ³ Model 2: Model 1 + physical activity and smoking status; ⁴ Model 3: Model 2 + energy intake and mPNNs-GS score.

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Mindfulness Is Associated with the Metabolic Syndrome among Individuals with a Depressive Symptomatology

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Guyot E et al. Nutrients. 2018 ;10(2).

Table 3. Multivariable logistic regression models between overall mindfulness ¹, the metabolic syndrome and its components according to depressive symptomatology in 17,490 individuals (NutriNet-Santé Study, France, 2011–2014).

	Models	No Depressive Symptomatology <i>n</i> = 14,760		Depressive Symptomatology <i>n</i> = 2730	
		OR (95% CI)	<i>p</i>	OR (95% CI)	<i>p</i>
Elevated WC (≥94 cm for men, ≥80 cm for women)	Model 1 ²	0.85 (0.78–0.92)	<0.0001	0.77 (0.65–0.91)	0.0028
	Model 2 ³	0.89 (0.82–0.96)	0.0050	0.78 (0.66–0.93)	0.0064
	Model 3 ⁴	0.90 (0.83–0.98)	0.012	0.80 (0.67–0.96)	0.014
High blood pressure (SBP ≥ 130 and/or DBP ≥ 85 mm Hg) or treatment	Model 1 ²	1.01 (0.93–1.11)	0.78	0.86 (0.72–1.04)	0.11
	Model 2 ³	1.02 (0.93–1.11)	0.68	0.88 (0.73–1.05)	0.16
	Model 3 ⁴	1.03 (0.94–1.12)	0.53	0.88 (0.73–1.06)	0.18
High triglycerides (≥ 150 mg/dL) or treatment	Model 1 ²	0.98 (0.85–1.12)	0.74	0.84 (0.64–1.09)	0.19
	Model 2 ³	1.01 (0.88–1.16)	0.88	0.82 (0.63–1.07)	0.15
	Model 3 ⁴	1.01 (0.88–1.16)	0.91	0.83 (0.63–1.08)	0.16
Low HDL-cholesterol (<40 mg/dL for men, <50 mg/dL for women) or treatment	Model 1 ²	1.03 (0.90–1.18)	0.65	0.70 (0.54–0.92)	0.0094
	Model 2 ³	1.06 (0.92–1.21)	0.43	0.72 (0.55–0.94)	0.015
	Model 3 ⁴	1.05 (0.92–1.20)	0.47	0.73 (0.55–0.95)	0.019
High fasting blood glucose (≥100 mg/dL) or treatment	Model 1 ²	1.02 (0.90–1.15)	0.74	0.68 (0.53–0.87)	0.0026
	Model 2 ³	1.04 (0.92–1.17)	0.57	0.68 (0.53–0.88)	0.0032
	Model 3 ⁴	1.04 (0.92–1.18)	0.54	0.69 (0.54–0.89)	0.0045

Abbreviations: OR, Odds Ratio; 95% CI, 95% Confidence Interval; ¹ The range of values were from 0 to 5 (higher scores indicated a greater mindfulness); ² Model 1: adjusted for age, sex, education level, and familial status; ³ Model 2: Model 1 + physical activity and smoking status; ⁴ Model 3: Model 2 + energy intake and mPNNs-GS score.

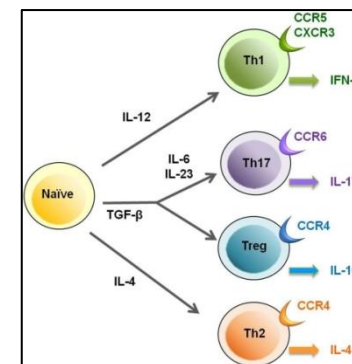


Merci de votre attention

➤ Stress de l'aidant, inflammation et Mindfulness



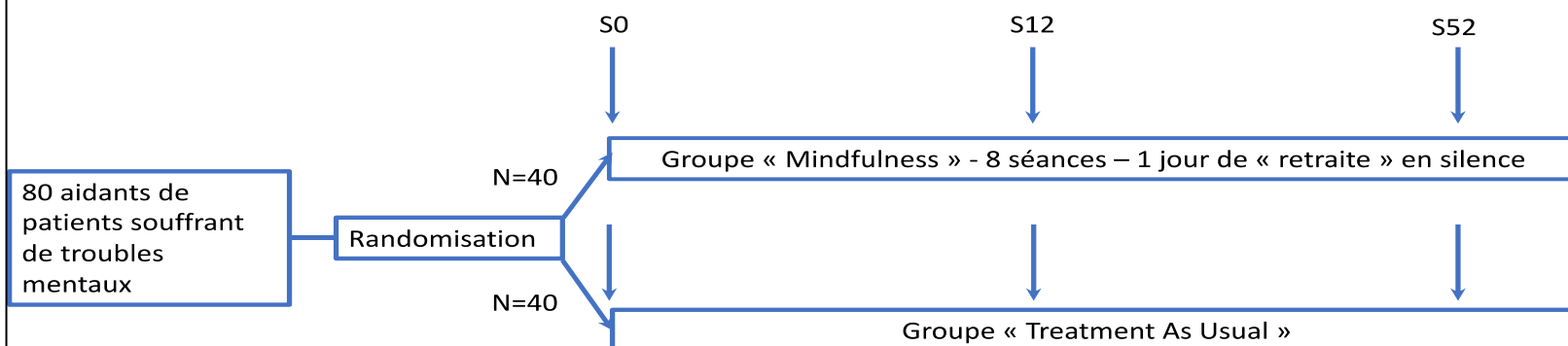
Protocole MindInfCARE (FRC-UNAFAM) 2017 : étude contrôlée de l'effet de la Mindfulness (MBSR) sur des marqueurs inflammatoires chez des aidants



➤ Stress de l'aidant, inflammation et Mindfulness

MindInfCare

Etude contrôlée randomisée comparant l'influence d'un programme de réduction du stress basé sur la pleine conscience (Mindfulness) vs. une prise en charge habituelle sur des variables psychologiques (stress perçu, anxiété) et sur des marqueurs biologiques liés à l'immuno-inflammation associés au stress psychique (CRPus, cytokines, activité lymphocytaire T.helper T.reg) chez des aidants de patients souffrant de pathologies psychiatriques sévères



A S0, S12, S52: mesure du niveau de stress perçu (PSS-10), d'anxiété et de dépression (Beck), affects positifs et négatifs (PANAS)

A S0, S12, S52 : prélèvement sanguin pour dosage CRPus, IL6, activité lymphocytaire Th1 Th2 Th17 Treg

A S0 : évaluation des traits de personnalité IN-OUT DASQ, Optimisme (LOT-R), Hostilité cynique (Cook Medley)

Protocole MindInfCARE (FRC-UNAFAM) 2017

Début de l'étude 1^{er} semestre 2019, 40 aidants MBSR vs. 40 aidants contrôles (TAU)

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