# Self-Regulation of Behavior Change

### Gabriele Oettingen

New York University University of Hamburg

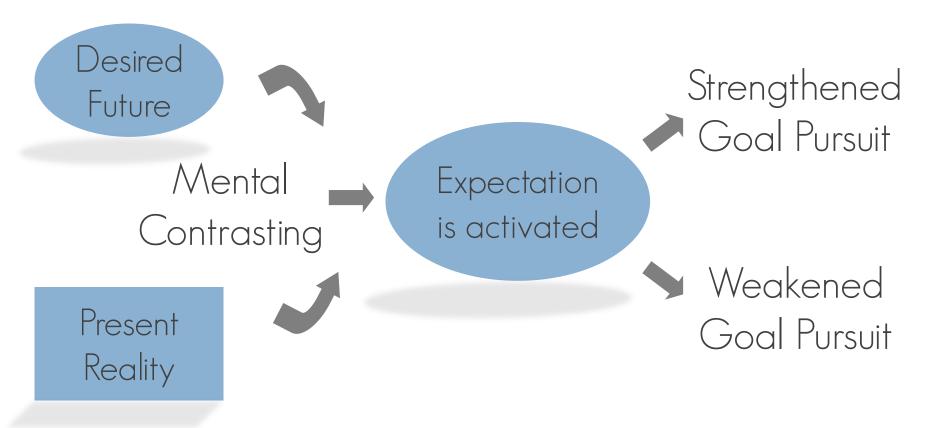


### Mental Contrasting

- Principle
- Mechanism
- Interventions
- Application

### Mental Contrasting: Principle

### Mental Contrasting



Oettingen (2012). European Review of Social Psychology, 23, 1-63.

## Mental Contrasting: Mechanisms

### How Does Mental Contrasting Affect Behavior Change?

Changes in Implicit Cognition

Changes in *Motivation* 

Changes in *Responses to Set-Backs* 

A. Kappes, Singmann, & Oettingen (2012). JESP, 48, 811-818. Oettingen (2012). European Review of Social Psychology, 23, 1-63.

### Mental Contrasting and Successful Goal Pursuit: Evidence

### Academic/vocational

- Vocational training
- Combining work and family life
- Learning a foreign language
- Studying abroad
- Mathematics
- Creativity tests

### Health

- Cigarette reduction
- Coping with stress
- Exercise
- Healthy eating

#### Interpersonal relations

- Problem solving
- Social responsibility
- Help seeking
- Help giving
- Reconciliation

Oettingen (2012). European Review of Social Psychology, 23, 1-63.

### Implementation Intentions

# If situation X occurs, then I will perform the goal-directed response Y!

If ... the waiter asks me to order a drink, then I will ... ask for a mineral water!

Gollwitzer (1999). American Psychologist, 54, 493-503.

### How Do Implementation Intentions Enhance Performance?

Changes in Activation of Critical Situation

Changes in Automaticity of Action Initiation

Gollwitzer (1999). American Psychologist, 54, 493-503.

Prerequisites for the Effects of Implementation Intentions

- Goal commitment is strong
- If-component specifies critical situation (e.g., challenging obstacle)
- Then-component specifies instrumental mean



Mental Contrasting with Implementation Intentions (MCII)

To pass math so I can go to

culinary school



What is my dearest **W**ish?



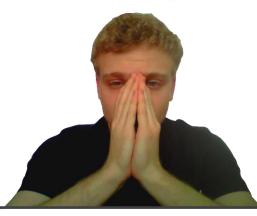
What would be

the best  $\ensuremath{\mathsf{O}}\xspace{\mathsf{utcome}}$  of fulfilling my

Wish?



teacher yells at me



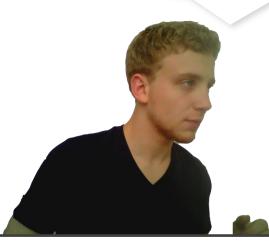
What is my main Obstacle, the

Obstacle in me?

If... my math teacher yells at me.

then 9 will ... breathe deeply 5 times

and get back to work



What can you do to overcome the Obstacle?

Make an if-then Plan!

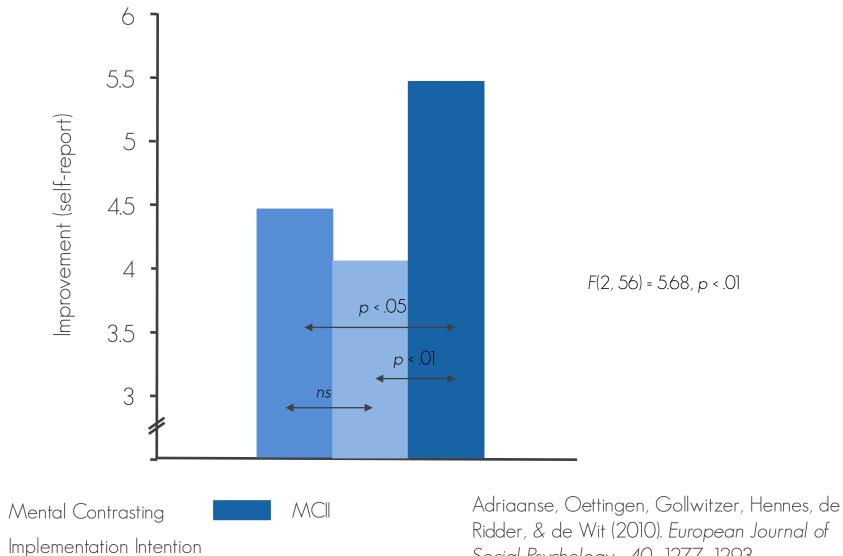


# WOOp

MCII as Behavior Change Intervention more than MC and II alone:

**Breaking Snacking Habits** 

### Breaking Snacking Habits

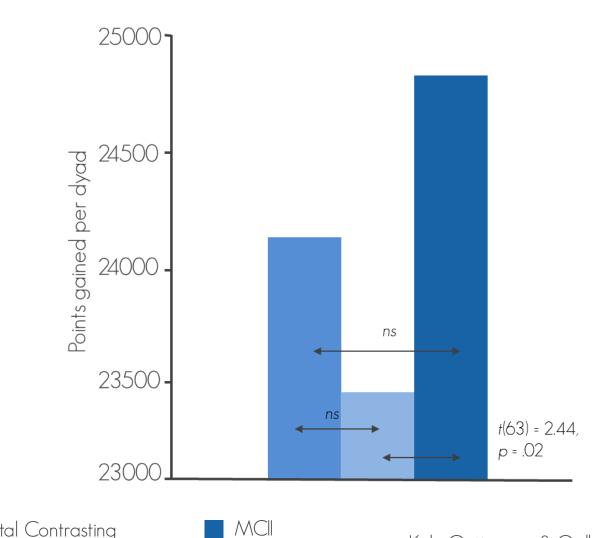


Social Psychology , 40, 1277-1293.

MCII as Behavior Change Intervention more than MC and II alone:

Finding Integrative Solutions

### Integrative Negotiation



Mental Contrasting

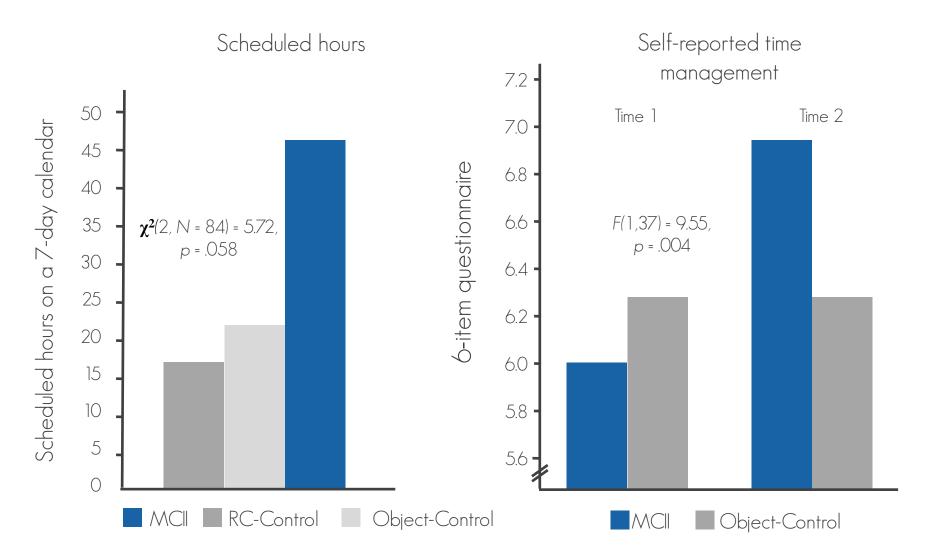
Implementation Intention

Kirk, Oettingen, & Gollwitzer (2013). International Journal of Conflict Management, 24, 148-165.

MCII as Behavior Change Intervention:

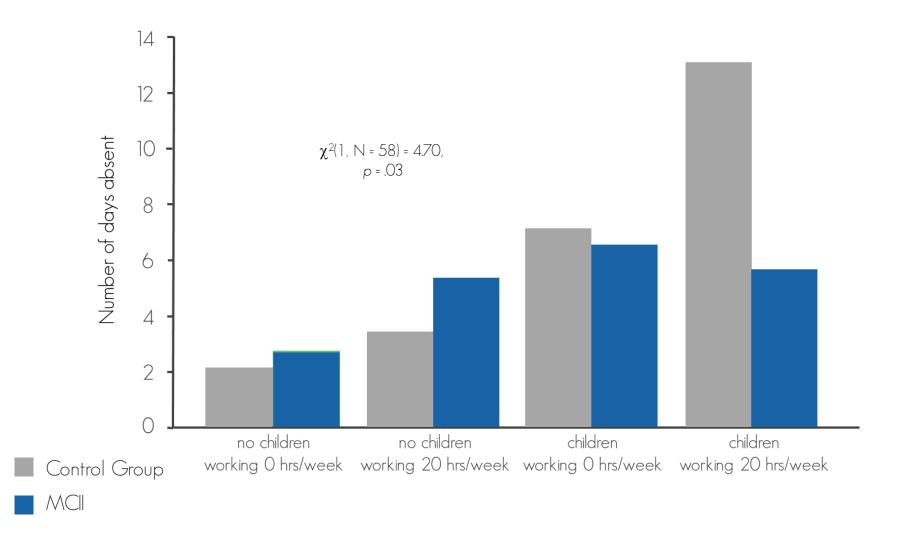
Time Management

### Time Management



Oettingen, Kappes, Guttenberg & Gollwitzer (in press). European Journal of Social Psychology.

### Time Management

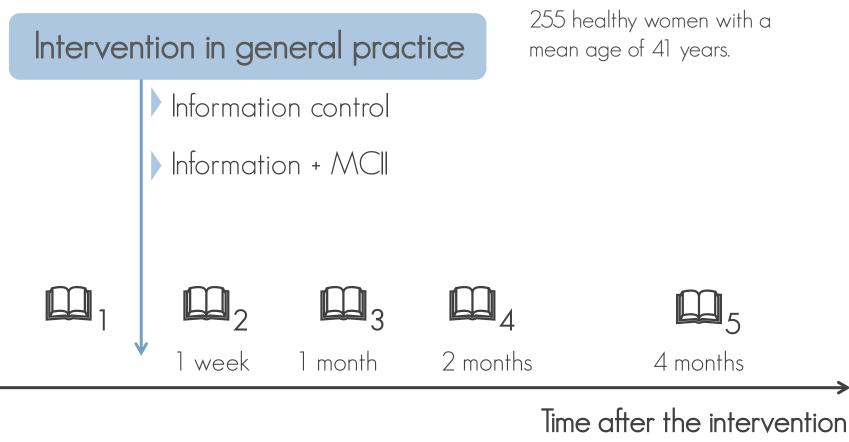


Oettingen, Kappes, Guttenberg & Gollwitzer (in press). European Journal of Social Psychology.

MCII as Behavior Change Intervention:

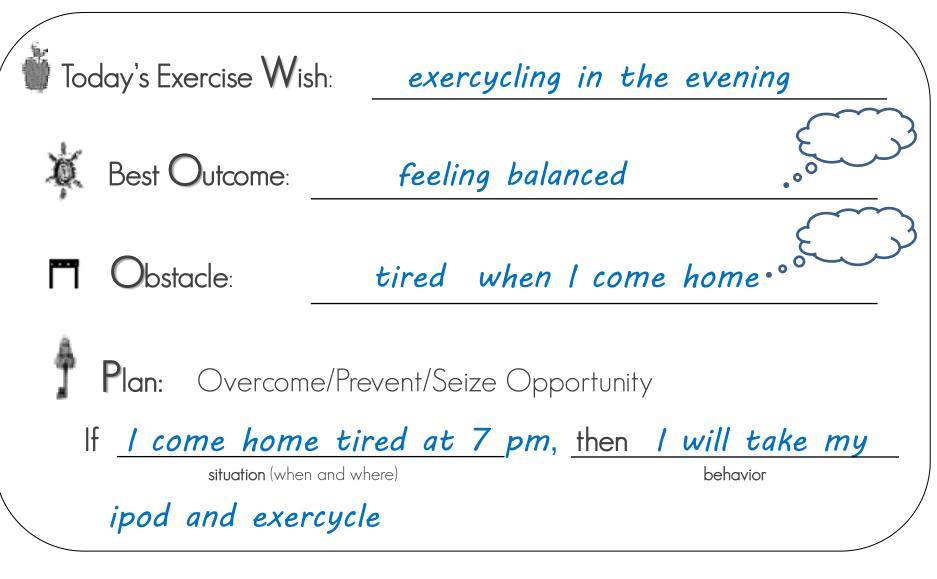
Improving Exercise and Diet

### Improving Exercise

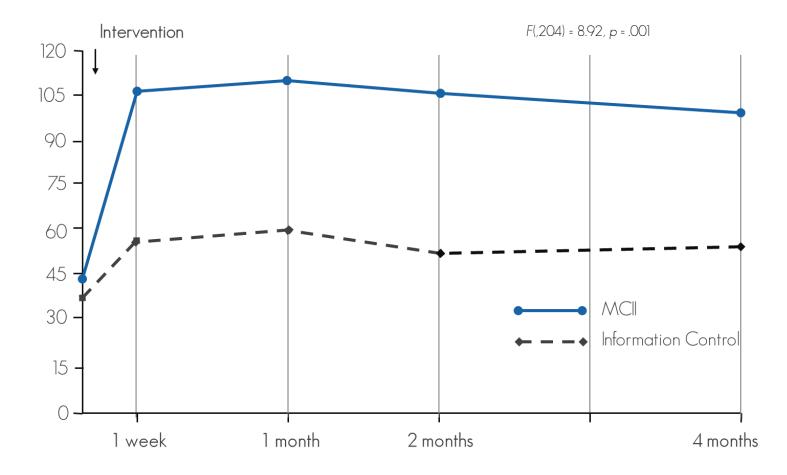




### MCII Intervention

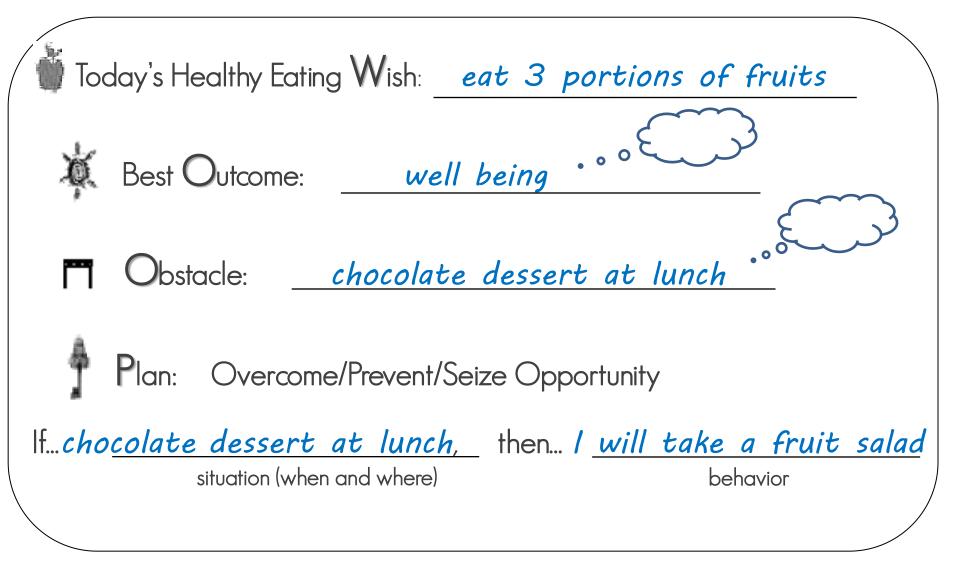


### Exercise after 4 Months

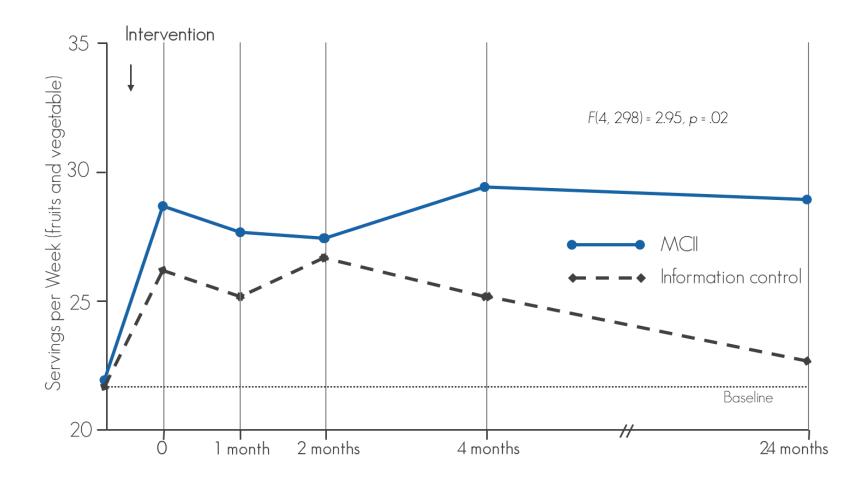


Stadler, Oettingen, & Gollwitzer (2009). American Journal of Preventive Medicine, 36, 29-34.

### MCII Intervention



### Healthy Diet after 2 Years

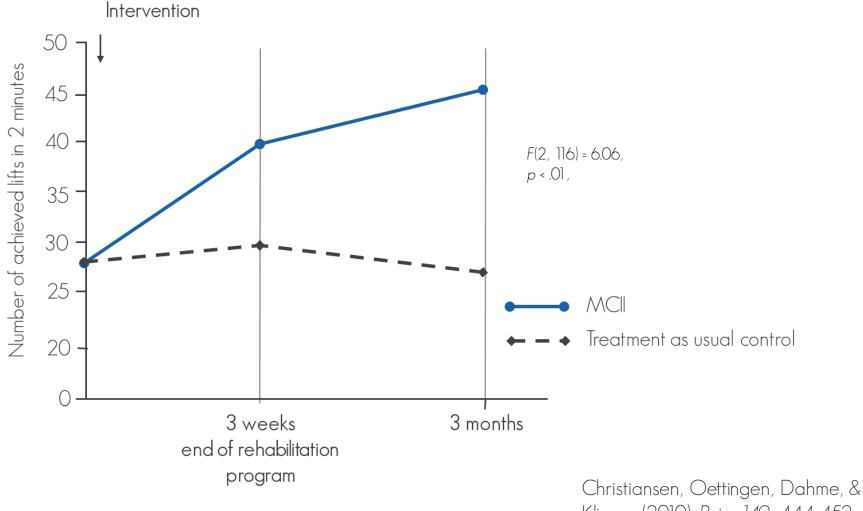


Stadler, Oettingen, & Gollwitzer (2010). Health Psychology, 29, 274-283.

MCII as Behavior Change Intervention:

Improving Physical Mobility in Chronic Back Pain Patients

### Improving Physical Mobility in Chronic Back Pain Patients

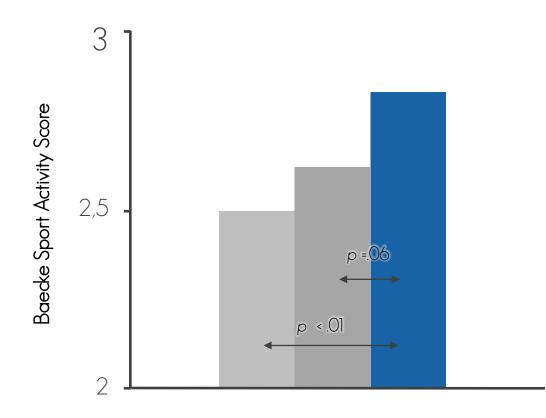


Klinger (2010). Pain, 149, 444-452.

MCII as Behavior Change Intervention:

Improving Exercise in Stroke Patients

### Sport Activity after 1 Year



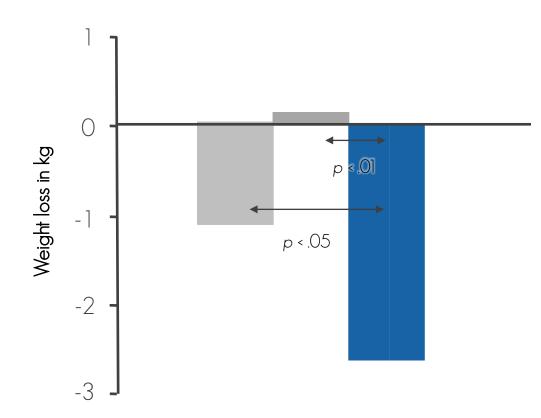
Information treatment as usual

Standardized information treatment

Standardized information treatment + MCII

Marquardt, Oettingen, Gollwitzer, & Liepert (2014). *Under Review* 

### Weight Loss After 1 Year

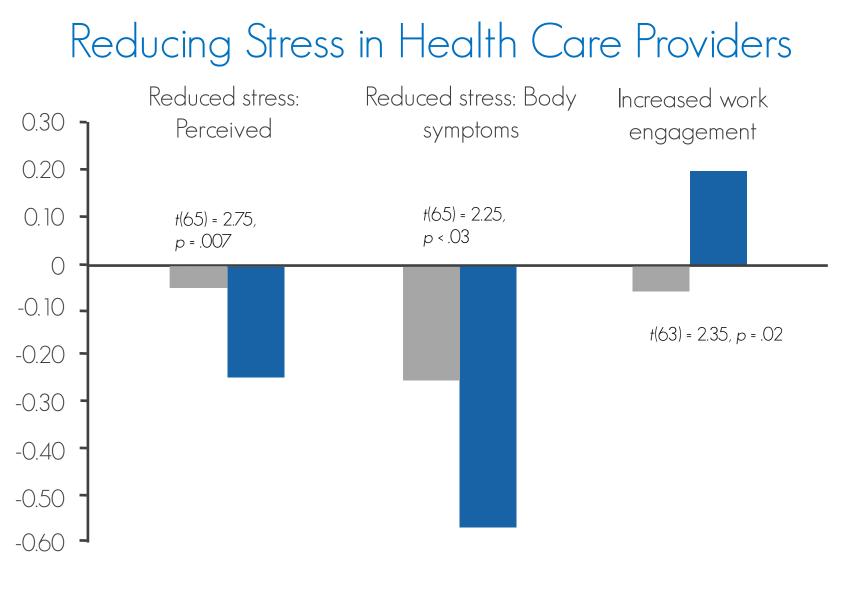


Information treatment as usual Standardized information treatment Standardized information treatment + MCI

Marquardt, Oettingen, Gollwitzer, & Liepert (2014). *Under Review* 

MCII as Online Behavior Change Intervention:

Reducing Stress in Health Care Providers



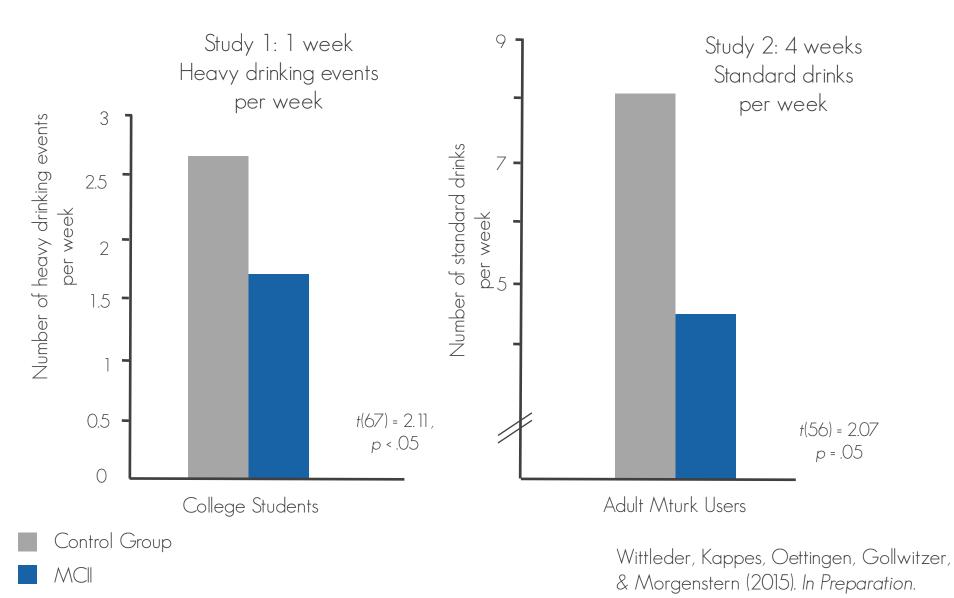


Grund, Gollwitzer, & Oettingen (2015). In Preparation.

MCII as Behavior Change Intervention:

Reducing Alcohol Consumption

### Reducing Alcohol Consumption



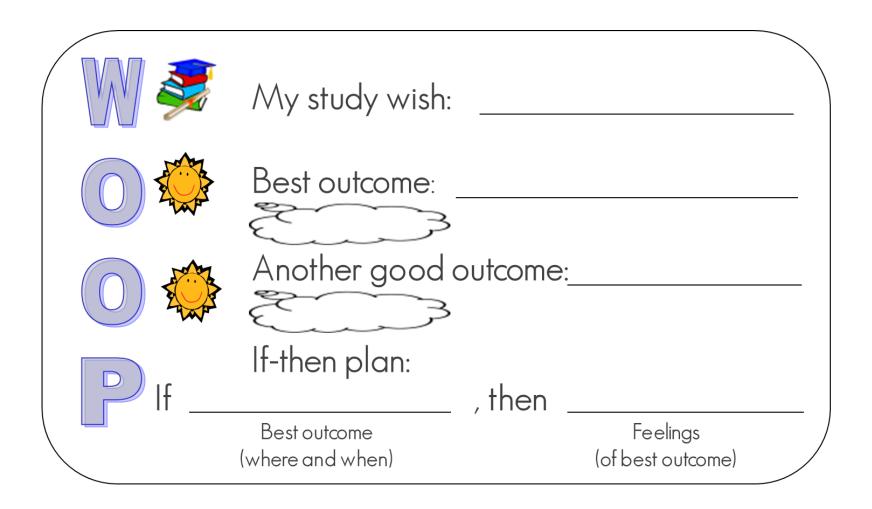
MCII as Behavior Change Intervention:

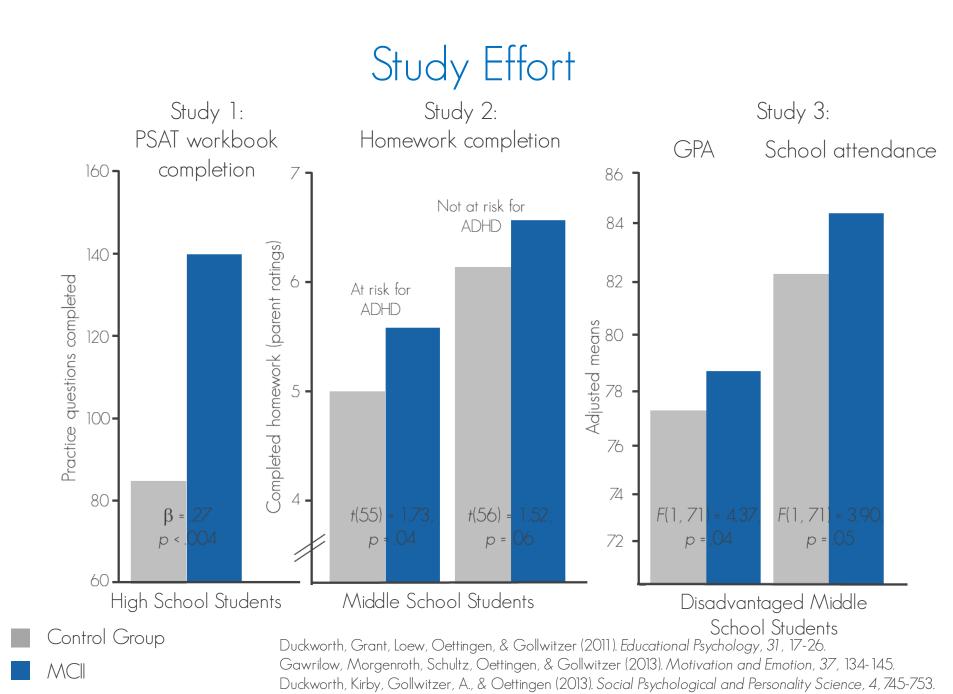
Study Effort and Performance in High School and Middle School Students

## MCII Intervention

	My study wish:	
	Best outcome:	
	Obstacle:	
	lf-then plan:	
	Obstacle (where and when)	Action (to overcome obstacle)

## Control





Mental Contrasting with Implementation Intentions (MCII)

#### Academic/vocational

- Work engagement
- Mastery of everyday life
- Decision making
- Negotiation performance
- Class attendance
- Course Grades
- Time Management

#### Health

- Exercise
- Stress Management
- Healthy diet
- Weight loss
- Pain management
- Insomnia

#### Interpersonal relations

- Fairness
- Reconciliation
- Perspective taking
- Reduced social anxiety
- Sustainable consumption

Oettingen (2012). European Review of Social Psychology, 23, 1-63.

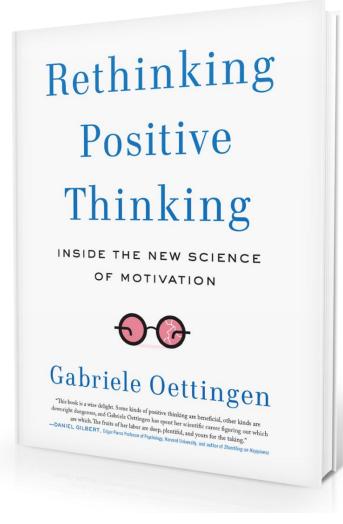
## Traditional Behavior Change Interventions...

- modify incentive value and expectations
- modify framing of status quo
- modify content or structure of goals

MCII is a meta-cognitive self-regulation strategy drawing on imagery that changes cognition and energy outside of awareness

## Mental Contrasting with Implementation Intentions

- Principle
- Mechanisms Cognition, Motivation, Feedback
- Interventions MCII



### Gabriele Oettingen

gabriele.oettingen@nyu.edu New York University University of Hamburg

www.woopmylife.org

Available now:



Penguin Random House

CURRENT

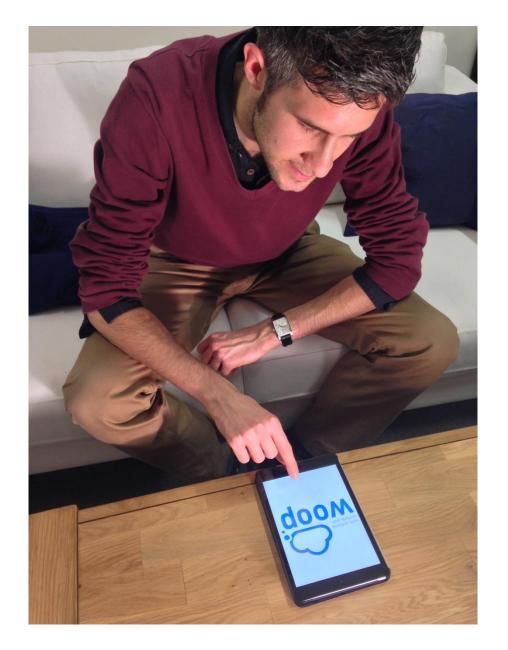


	o
ul	8:52 53% E
list	quick reminder
tips	audio
	¢°
	$\bigcirc$

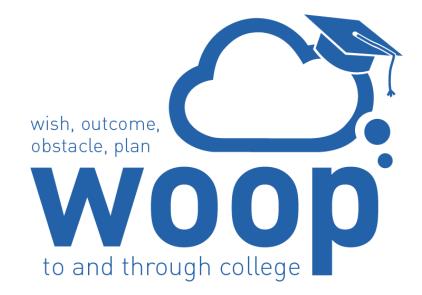
•	•	
n11	8:52	53% 💷
quick	wish, o obstact	voop
professional	health	personal
WISH		
OUTCOME		
		$\mathcal{P}_{\circ}$
OBSTACLE		

·	
list with a	53% <b>••</b>
Sort by content 오	O
prepare meeting	2014-11-28
talk to Jennifer	2014-11-28
go to gym	2014-11-28
wc	)OP every day!

· _	
audio	53% <b>■</b>
WOOP audio leads you throug exercise step by step.	n the WOOP
WOOP it: 24 hours	
0:00	-5:49
Stream other guides (internet connection required)	
WOOP it: 1 month	
0:00	-5:49
WOOP it	
0:00	-5:48



WOOP helps me to organize my days and to focus on the important tasks



	۲	•		
al		8:52	53% 💷	
MY	WO	op hc	ME	
	my ac	ademic Wishe	s	
i	my personal Wishes			
E				
	my WOOP history			
₩	quick	WOOP		
Info	Tips	Reminder	Settings	
I want t training	o do the )	WOOP		

	•		
ul	8:52		53% 💷
	MY WO	OP	
WISH			
ask Dr. F	rome for a letter of	recommend	ation
<b>0</b> UTC0	ME	feel rel	ieved
OBSTA		I fee	el shy
PLAN	If I feel shy		
	Then I will send D	r. Frome an e	email
update stat	us of your Wish!		
			100 %
×		f	$\checkmark$
	$\bigcirc$		



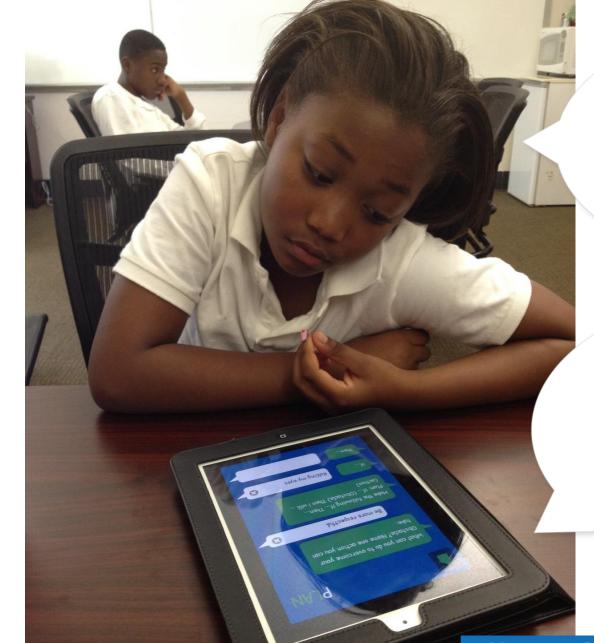
Since I started using WOOP my goals have gotten bigger and I feel my accomplishments more.

My emotions have changed a lot. The WOOP use has helped me kind of control them

> MINNESOTA OFFICE OF HIGHER EDUCATION

King Center Charter School

READY



...I have gotten a lot of confidence using this method.

I have found that there is always an escape plan from the obstacle that is blocking my way from success.

Minnesota Office of Higher Education





## WOOP to and through college WOOP app









## Thank you to Motivation Labs: NYU and UHH



BILL& MELINDA GATES foundation







Universität Konstanz

**NEW YORK UNIVERSITY** 



DAAD

Deutscher Akademischer Austausch Dienst German Academic Exchange Service

# Self-Regulation of Behavior Change

## Gabriele Oettingen

New York University University of Hamburg

