



Lekker roken!

1 saffie kan toch geen kwaad?

(manifestaties van de verslaving-incentive structuur)

Prof. dr. Arie Dijkstra





“Uitbannen roken leidt tot hogere zorgkosten

Het volledig uitbannen van roken leidt tot een daling in kosten van rookgerelateerde ziekten. Door het uitbannen van roken neemt de levensverwachting toe en lopen mensen meer kans om op latere leeftijd nog andere ziekten zoals dementie te krijgen. Dit leidt tot extra zorggebruik en -kosten. Deze extra kosten overtreffen de kortetermijn

besparingen in kosten van rookgerelateerde ziekten. **De totale zorgkosten zullen daardoor stijgen.”**



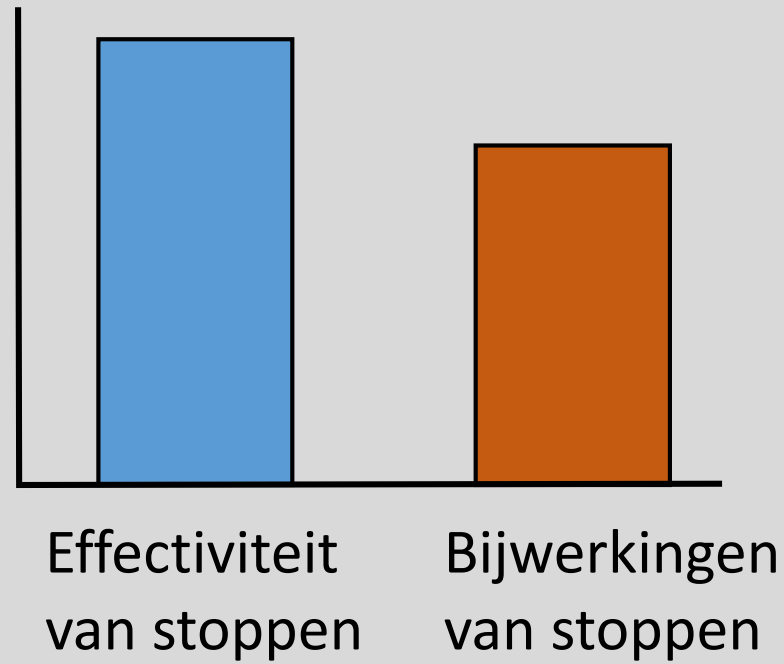
1. Kwaliteit van leven en gezonde jaren van mensen
2. Verslavende karakter



1



werking en bijwerkingen van stoppen met roken



Cancer

- Bladder cancer
- Cervical cancer
- Esophageal cancer
- Kidney cancer (renal cell and renal pelvis)
- Laryngeal cancer
- Leukaemia (acute myeloid leukaemia)
- Lung cancer
- Oral cancer (oral cavity and pharynx)
- Pancreatic cancer
- Stomach cancer (gastric cancers)

Respiratory diseases

- Chronic obstructive pulmonary disease
- Pneumonia
- Respiratory effects in utero (reduced lung function in infants)
- Respiratory effects in childhood and adolescence (impaired lung growth, early onset of lung function decline, respiratory symptoms: coughing, phlegm, wheezing, dyspnoea, asthma-related symptoms)
- Respiratory effects in adulthood (premature onset and accelerated age-related decline in lung function)
- Other respiratory effects (adult respiratory symptoms including coughing, phlegm, wheezing, dyspnoea; poor asthma control)

Cardiovascular diseases

- Abdominal aortic aneurysm
- Atherosclerosis
- Cerebrovascular disease (stroke)
- Coronary heart disease

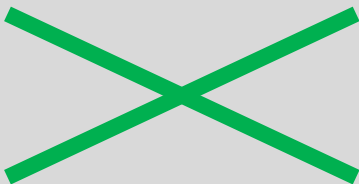
Reproductive effects

- Foetal death and stillbirths, sudden infant death syndrome
- Fertility reduction
- Low birth weight and foetal growth restriction
- Pregnancy complications (premature rupture of membranes, placenta previa, placental abruption; preterm delivery and shortened gestation)

Other effects

- Cataract
- Diminished health status/morbidity (increased absenteeism and use of medical care services; adverse surgical outcomes related to wound healing and respiratory complications)
- Hip fractures
- Low bone density in post-menopausal women
- Peptic ulcer disease in persons who are *Helicobacter pylori* positive



		Genetic susceptibility CAD through smoking	
		Strong	Weak
Genetic susceptibility LCa through smoking	Strong		
	Weak		

Genetic susceptibility to tobacco-related cancer

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Although cigarette smoking is the dominant risk factor for several epithelial cancers, only a small fraction of individuals with tobacco exposure develop cancer. The underlying hypothesis is that genetic factors may render certain smokers more susceptible to cancer than others. Genetic alterations in critical regulatory pathways may predispose cells to carcinogenesis. These pathways include regulation of xenobiotic metabolism; control of genomic stability, including DNA repair mechanisms, cell-cycle

tobacco and lung cancer, as 87% of lung cancers are attributed to tobacco exposure, and the relative risk for lung cancer in current smokers is up to 20 times higher than that for those who have never smoked (Shopland *et al.*, 1991). However, not all smokers develop cancer. Peto *et al.* (2000) estimated that the cumulative risk of death from lung cancer by age 75 years (in the absence of other causes of death) was 16% in 1990 in male cigarette smokers and 10% in female cigarette smokers.

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DOI 10.1007/s00395-004-0465-8

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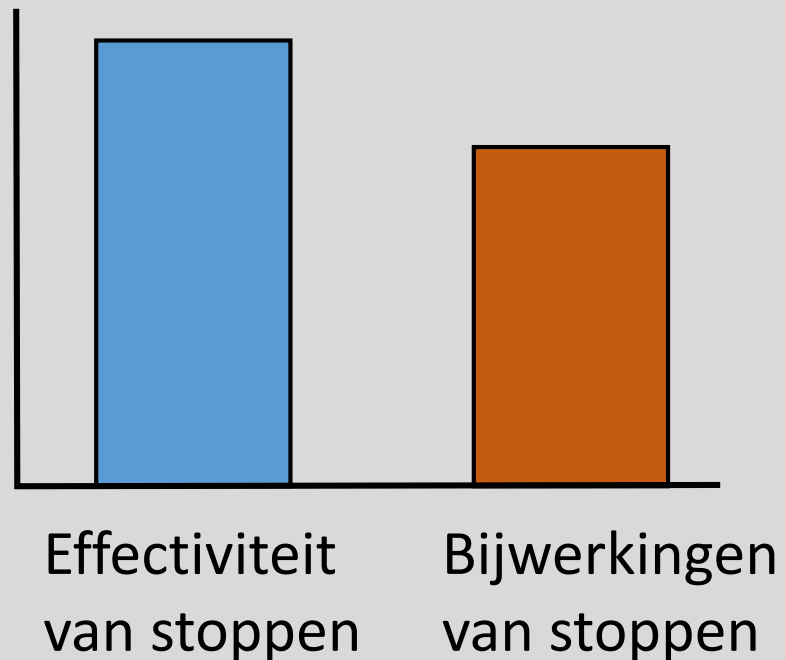
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ORIGINAL CONTRIBUTION

Glutathione S-transferase gene polymorphism as a susceptibility factor in smoking-related coronary artery disease

Abstract Coronary artery disease (CAD) is the leading cause of morbidity and mortality in the world, and cigarette smoking is a major contributing factor to the disease. Glutathione S-transferase (GST) enzyme is implicated in the detoxification of carcinogens present in tobacco smoke and consequent polymorphisms in this gene may confer susceptibility to cardiovascular disease if DNA damage is important in CAD. Therefore, we examined this question in a case-control study of subjects having coronary atheroma by angiography and with a past history of myocardial infarction (MI). The study population consists of 247 healthy controls and 148 consecutive patients who had undergone coronary angiography for suspicion of coronary artery disease. DNA was extracted from whole blood, and the GSTM1 and GSTT1 polymorphisms were determined using a real-time polymerase chain reaction (PCR). We found that the null GSTM1 and GSTT1 genotypes were associated with an increase in the risk of developing coronary heart disease (OR = 1.14; 95% CI: 0.71 – 1.82; OR = 1.38; 95% CI: 0.82 – 2.32), respectively, but this increase was not significant. Patients who smoke having the null genotypes of GSTM1 (OR: 1.63 (1.10 – 2.63)) and GSTT1 (2.66 (1.50 – 4.72)) and both (3.20 (1.37 – 7.45)) were at a higher risk for developing coronary heart disease. In conclusion, the finding of a significant association between GSTM1 and T1 with smoking status may influence cardiovascular disease via DNA damage.

wanneer is het tijd voor een bijsluiter?





2



Voor



Na





Voor



Roken

Na



nicotine



lichaam

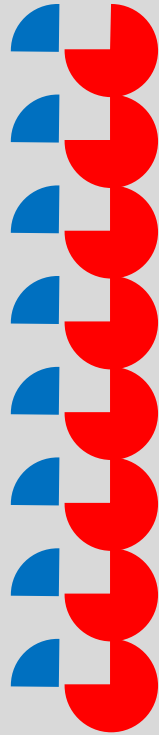


normaal
functioneren



1

tolerantie-ontwikkeling

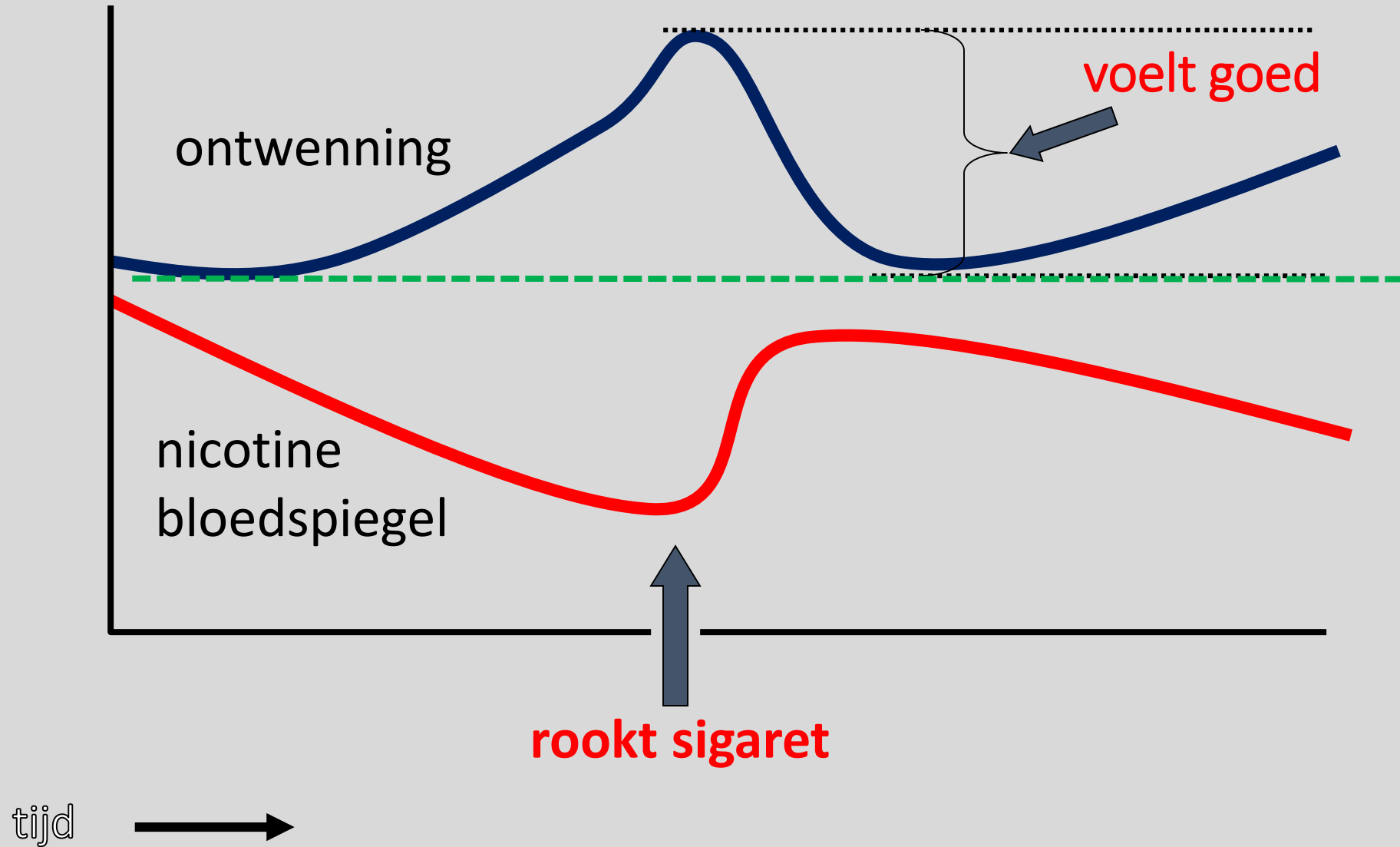


normaal
functioneren

2

ontwenning







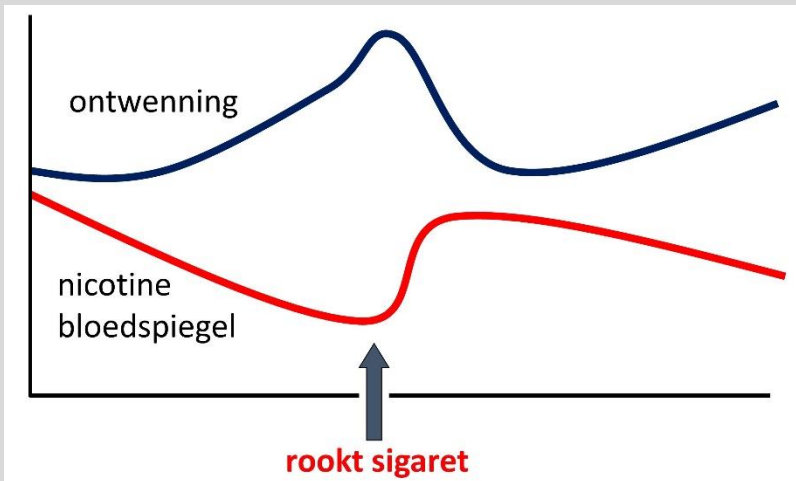
Ontwenningsverschijnselen

ROKEN

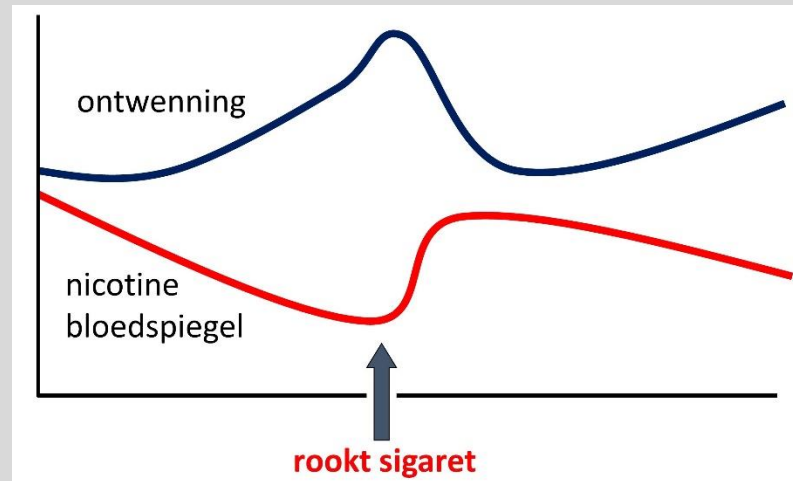
Voordelen van roken

• Boosheid, irritatie	→	• Kalmeert, rustgevend
• Spanning, angst	→	• Ontspant, stressbestendig
• Concentratieproblemen	→	• Helpt concentreren
• Honger	→	• Verlaagd eetbehoefte
• Sombereheid	→	• Oppepper, alert
• Slaapproblemen	→	• Helpt slapen/ontspannen
• Zin om te roken	→	• Bevredigend gevoel

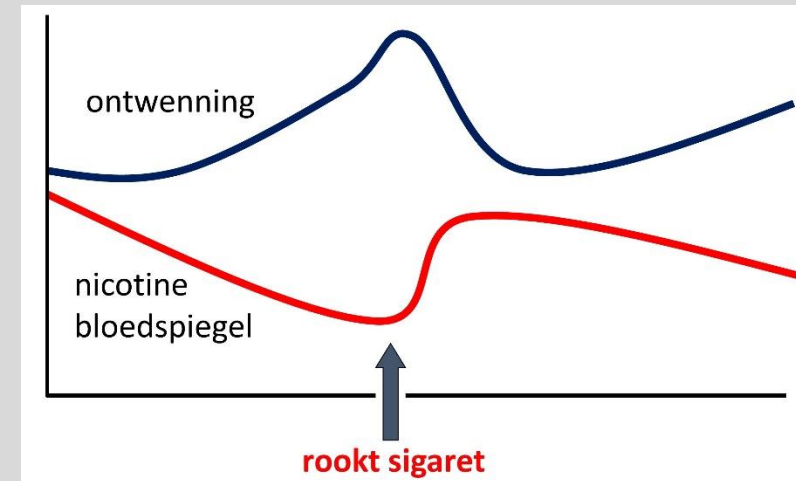
Leertrial 1



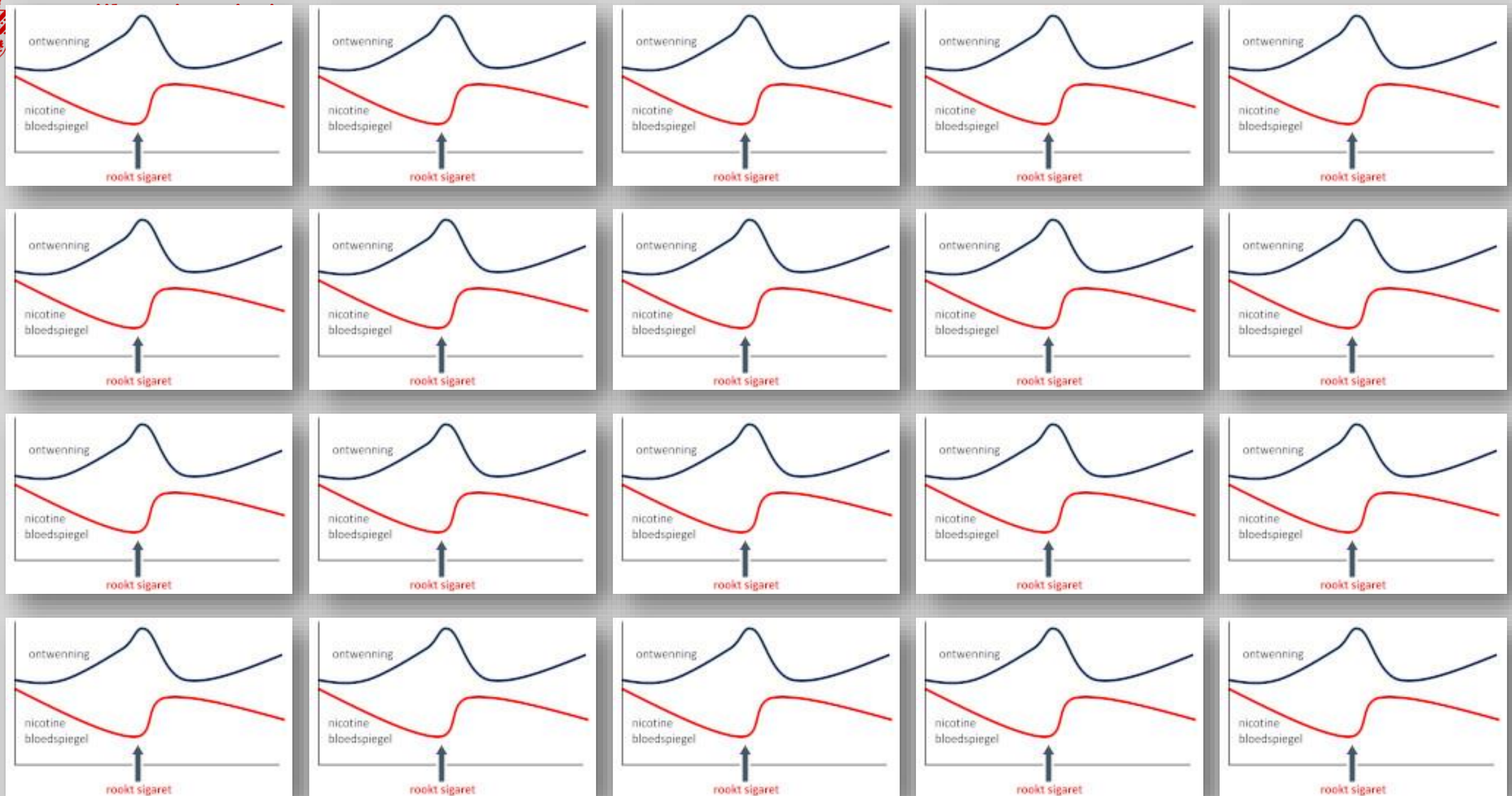
Leertrial 2



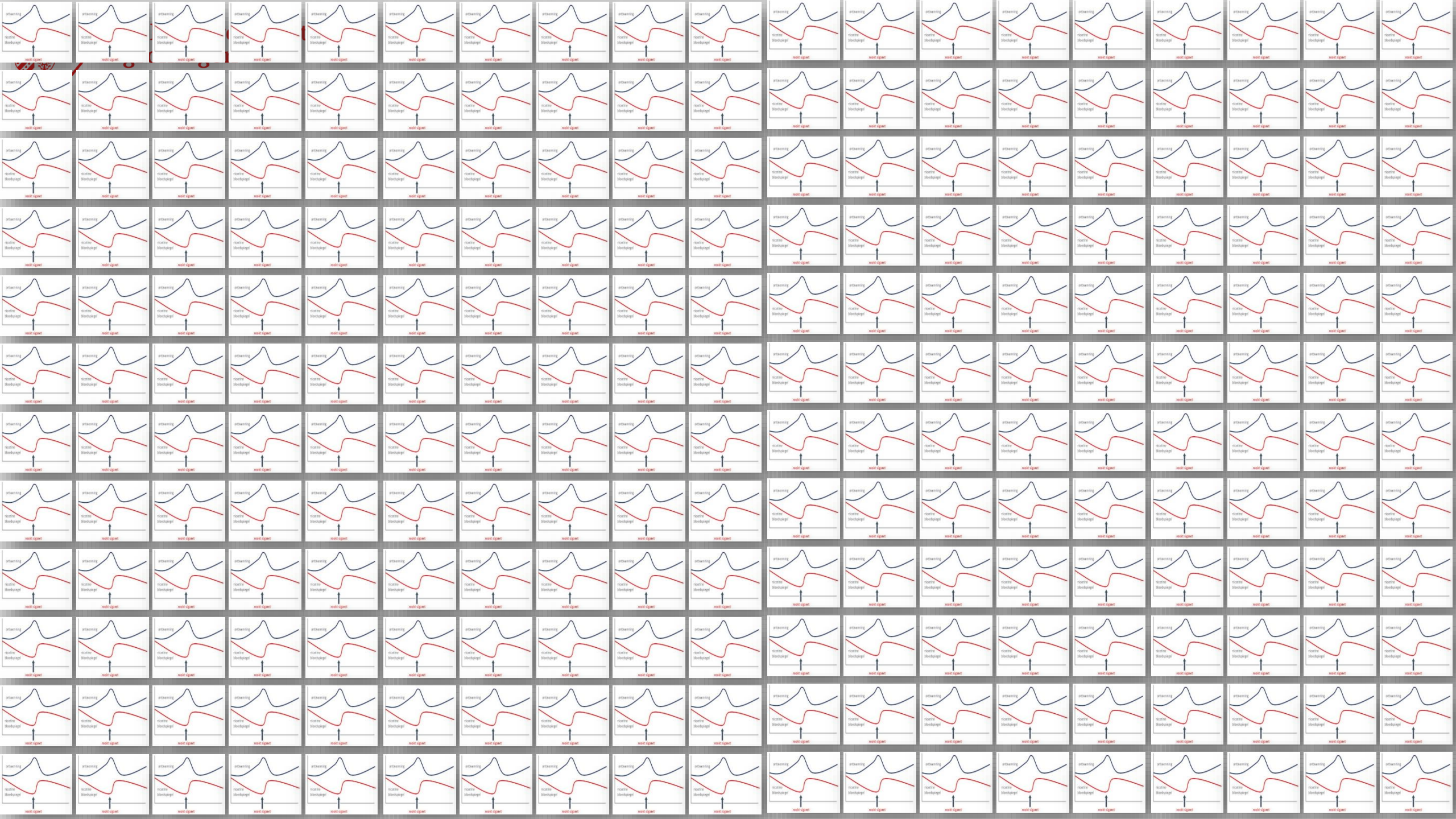
Leertrial 3

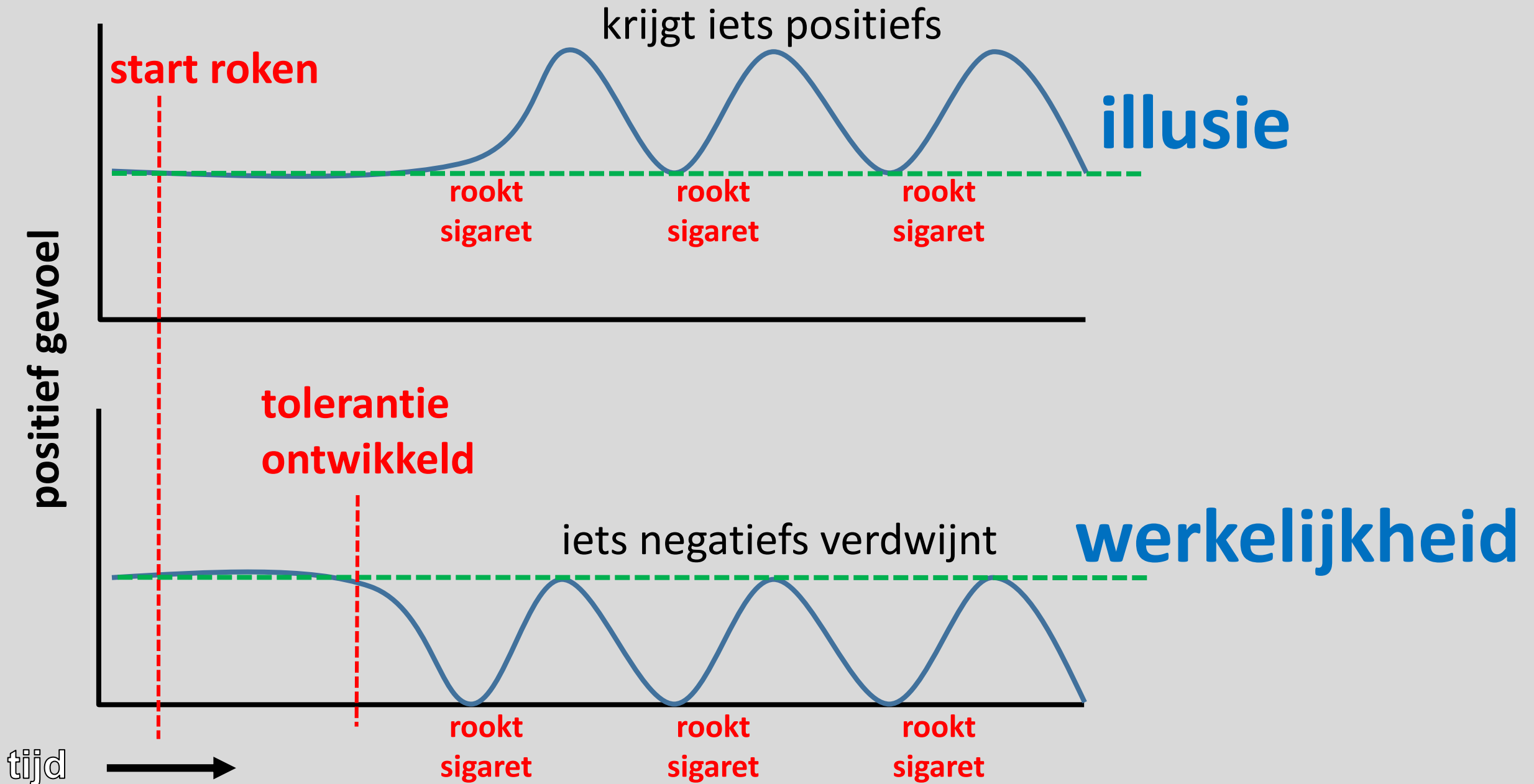


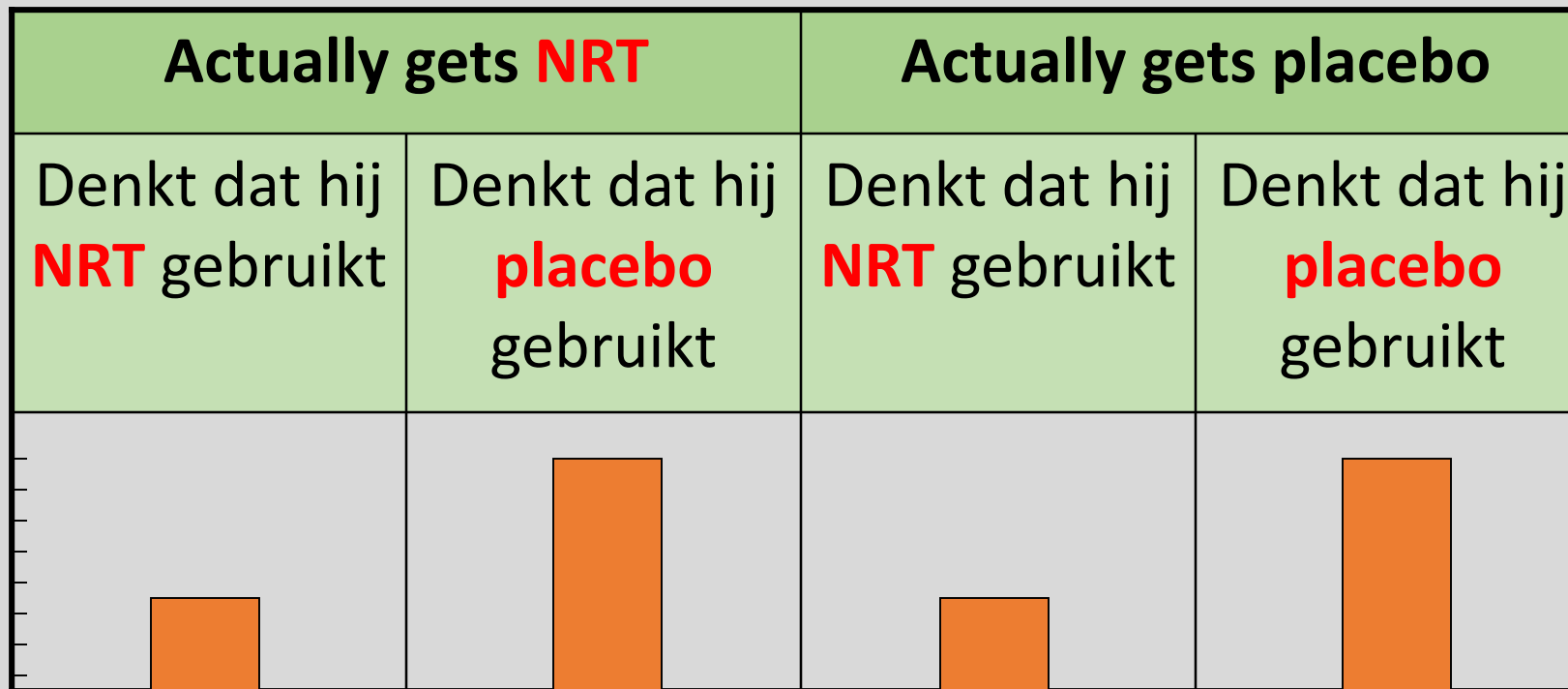
20 jaar x 365 dagen x 13 sigaretten per dag = 47.450 leertrials



20 jaar x 365 dagen x 13 sigaretten per dag = 47.450 leertrials







Gerapporteerde ontwenningverschijnselen



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Journal of Substance Abuse Treatment 23 (2002) 367–374

Journal of
Substance
Abuse
Treatment

Regular article

Is the FTND a measure of physical as well as psychological tobacco dependence?

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Abstract

The Fagerström Test for Nicotine Dependence (FTND) has been developed to assess tobacco dependence from a physical perspective and to match treatments to individuals on the basis of the extent of the physical dependence. This study assessed the extent to which the FTND also measures psychological tobacco dependence. In three independently recruited samples of smokers, FTND scores, scores on indices of psychological dependence and smoking cessation were assessed. The results show that the indices of psychological dependence in all three samples explained about 20% of the variance in FTND scores. Furthermore, the FTND and the indices of psychological dependence both predicted quitting activity prospectively with two quitting measures in all three samples. Lastly, when the FTND and the indices of psychological dependence were combined in one model, the psychological dependence measures predicted quitting activity more consistently than the FTND, although the overlap between the two measures of dependence was small. © 2002 Elsevier Science Inc. All rights reserved.



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Drug and Alcohol Dependence 73 (2004) 267–278

DRUG and
ALCOHOL
DEPENDENCE

www.elsevier.com/locate/drugalcdep

Prospective examination of effects of smoking abstinence on cortisol and withdrawal symptoms as predictors of early smoking relapse

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Received 3 July 2003; received in revised form 3 October 2003; accepted 23 October 2003



Residual Outcome Expectations and Relapse in Ex-Smokers

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From a social cognitive theoretical point of view, strong positive outcome expectations of smoking are a cause of relapse in smoking cessation, working in concert with self-efficacy. This study investigated whether and to what extent this could be verified in a sample of ex-smokers. Some ($N = 324$) ex-smokers were followed for 7 months. At Time 1 (T1) and Time 2 (T2), participants filled in a self-report questionnaire assessing residual outcome expectations (ROEs), self-efficacy, craving for tobacco, and smoking behavior, which was sent and returned by mail. First, prospective analyses showed that ROEs assessed at T1 predicted relapse reported at T2 over and above self-efficacy. Second, the influence of ROEs (and self-efficacy) on relapse was mediated by craving experience. Third, the hypothesized interactions between ROEs and self-efficacy were significant and meaningful.

Key words: smoking, relapse, outcome expectations, self-efficacy



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Addictive Behaviors Reports

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



Experimentally induced states of mind determine abstinent smokers' level of craving in reaction to smoking-cues

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Self-efficacy

ABSTRACT

Introduction: The present study aims to contribute to our knowledge on the causes of variations in experienced craving of (ex)smokers. The general idea is tested that when (ex)smokers are exposed to a smoking-cue, their level of craving is determined by the momentary *state of mind* through which the smoking-cue is interpreted.

Methods: A cue-reactivity paradigm in temporary abstinent smokers is applied to trigger craving responses under different experimentally induced states of mind. Craving is assessed with a three-item self-report measure. In study 1 ($N = 120$) a self-affirmation procedure is applied right before abstinent smokers were exposed to their own smoking paraphernalia. In study 2 ($N = 140$) abstinent smokers received bogus feedback inducing a high or low self-efficacy and strong or weak positive outcome expectations.

Results: Study 1 showed a significant interaction: When involvement was high, self-affirmation increased the level of craving but when involvement was low self-affirmation lowered craving. Study 2 also showed a significant interaction: Only when the positive outcome expectation of smoking were high, self-efficacy lowered the level of craving. All analyses were controlled for the number of cigarettes smoked a day and number of past quit attempts.

Conclusions: The present studies provide experimental evidence that levels of craving can be determined by momentary *states of mind*. This theoretical perspective can be integrated in existing conditioning and social cognitive learning perspectives on craving and substance use.

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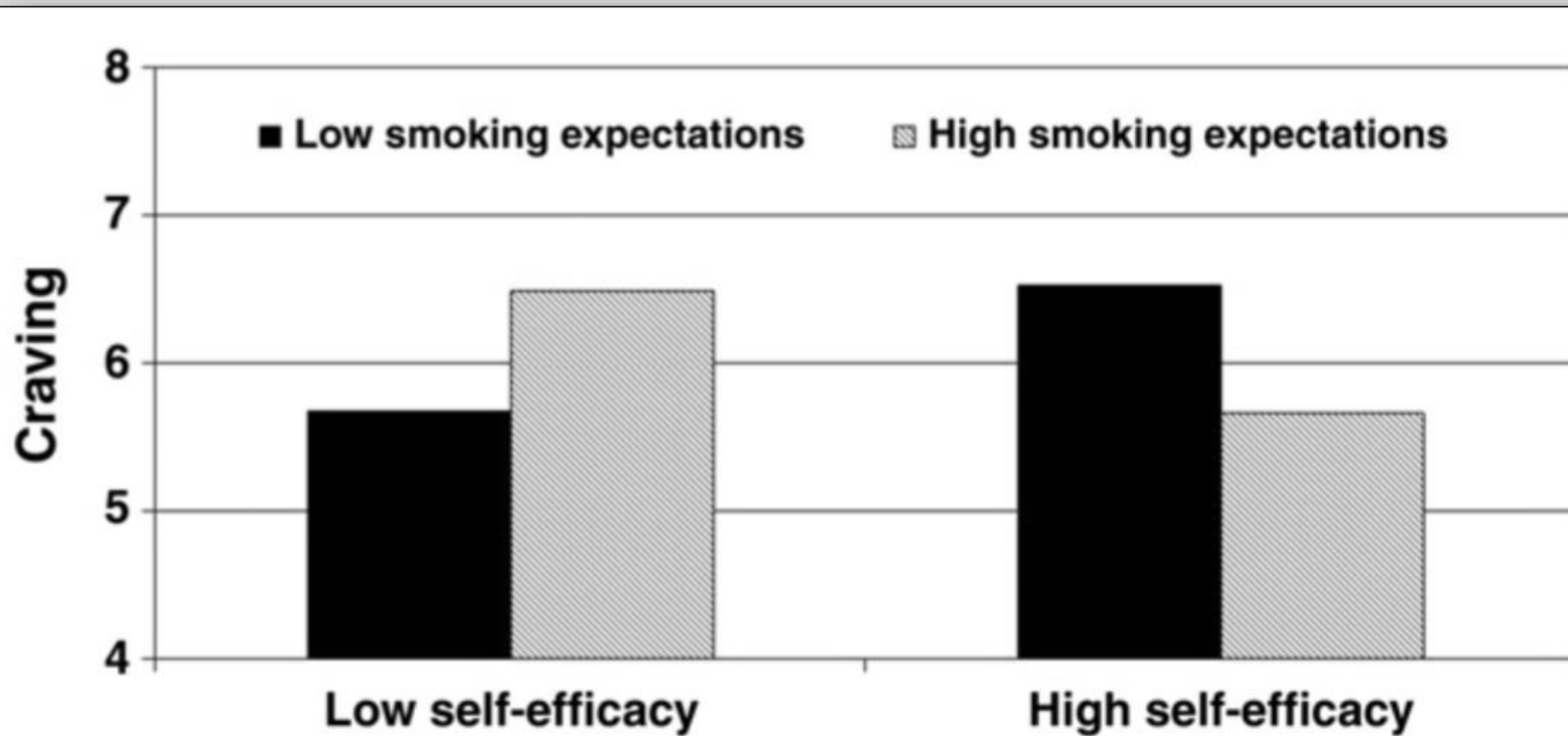


Fig. 2. The effects of self-efficacy and smoking expectations on craving.

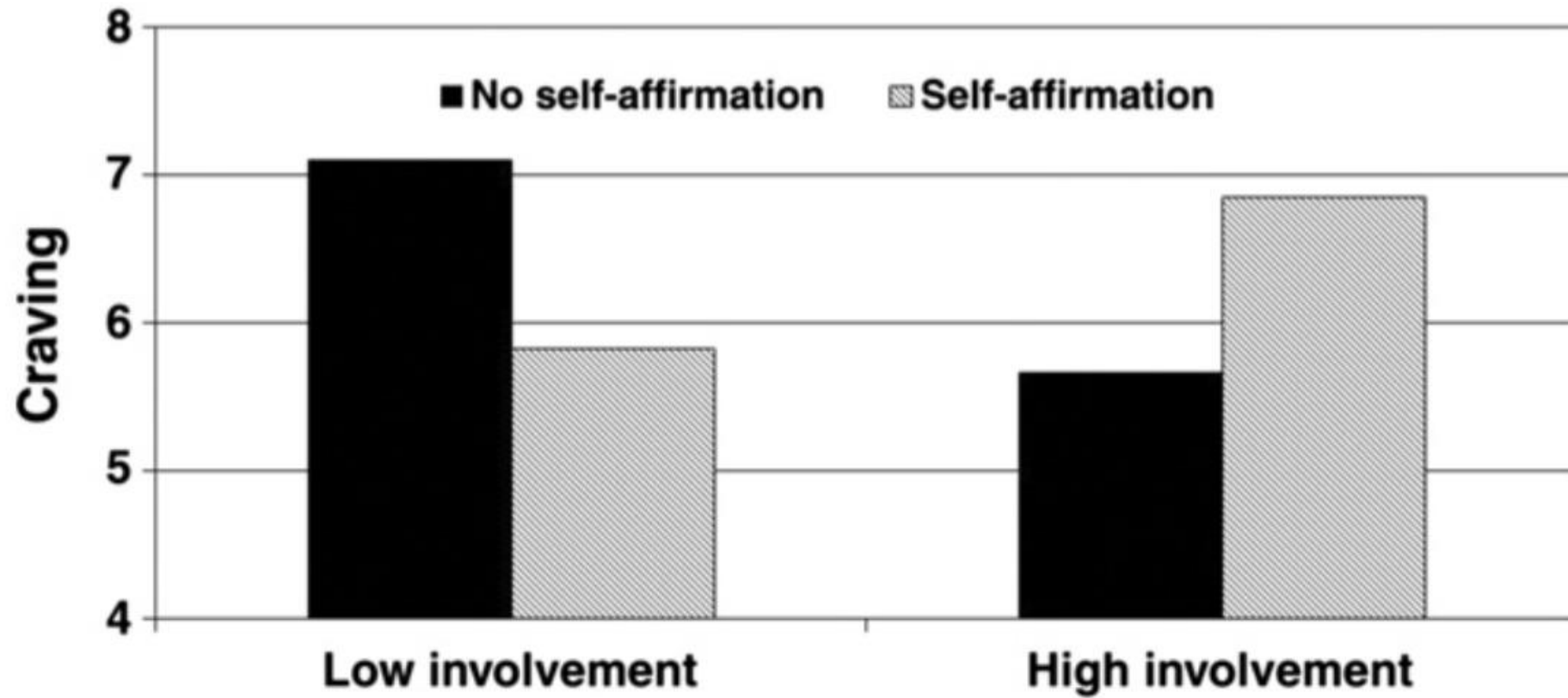
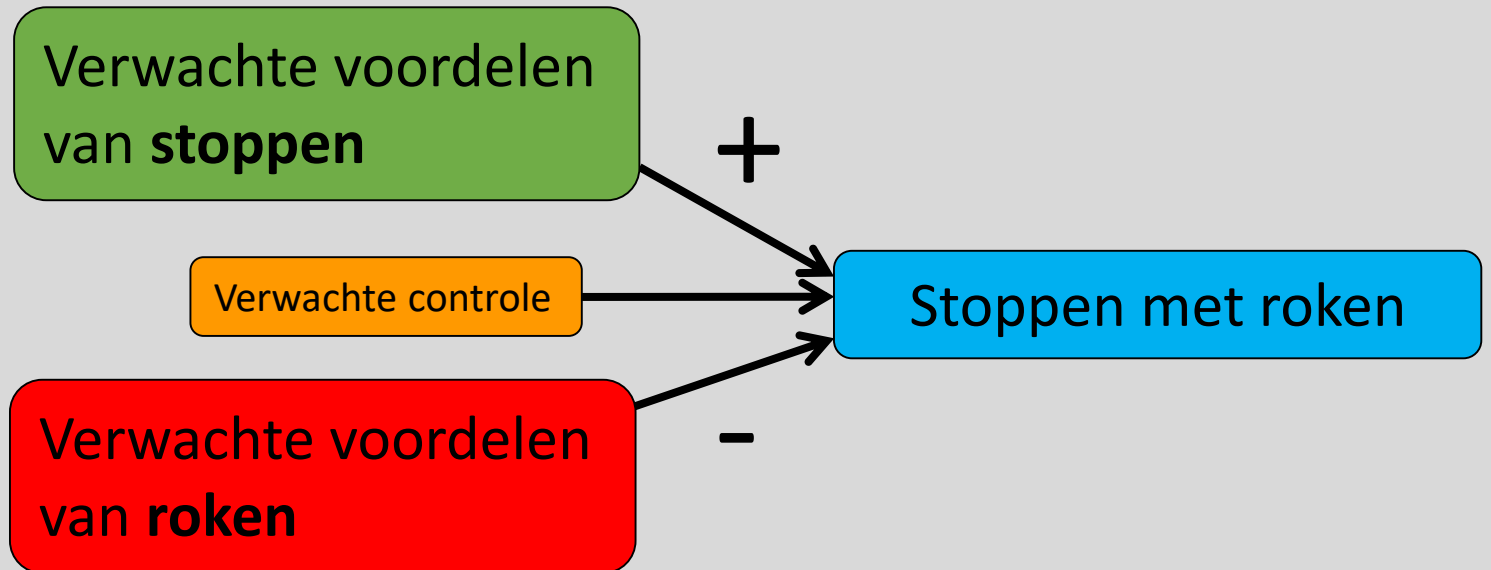


Fig. 1. The effects of involvement and self-affirmation on craving.



determinanten van stoppen met roken





determinanten van stoppen met roken

Main-stream
stoppen-met-roken
interventies



Verwachte voordelen
van **stoppen**

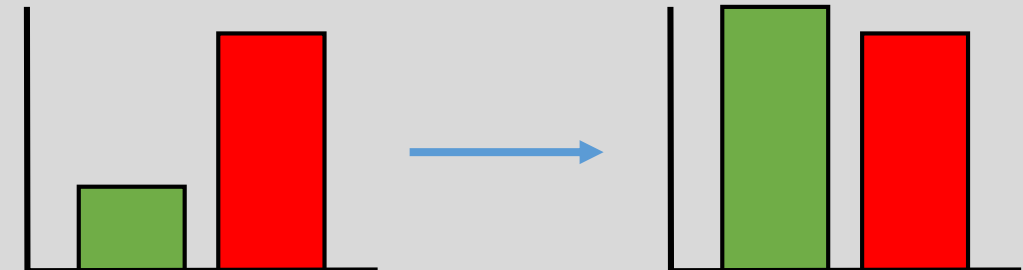
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Verwachte controle

-

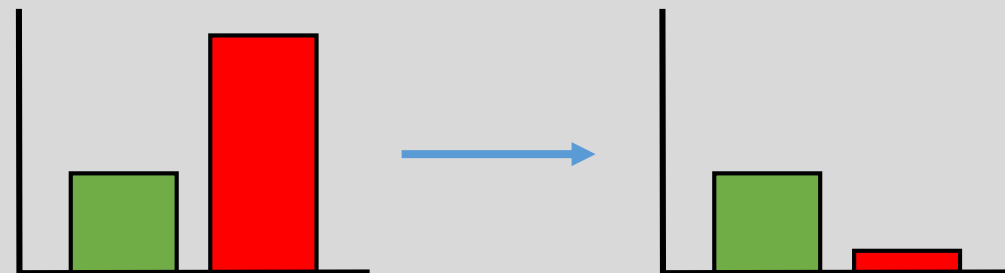
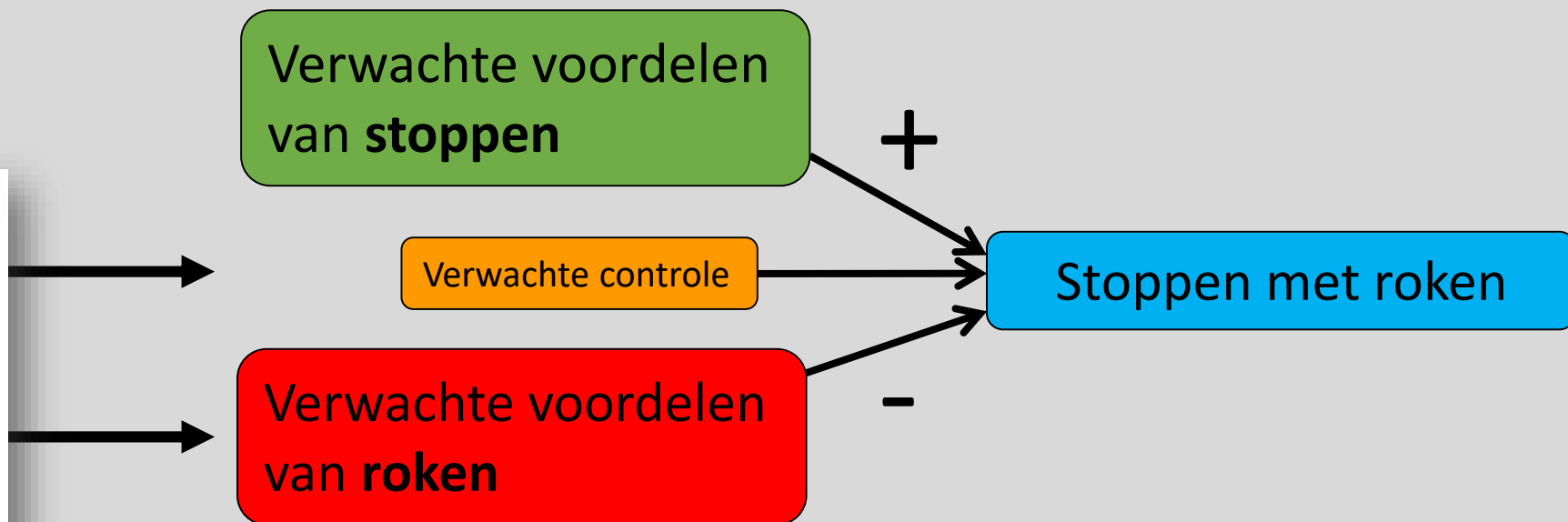
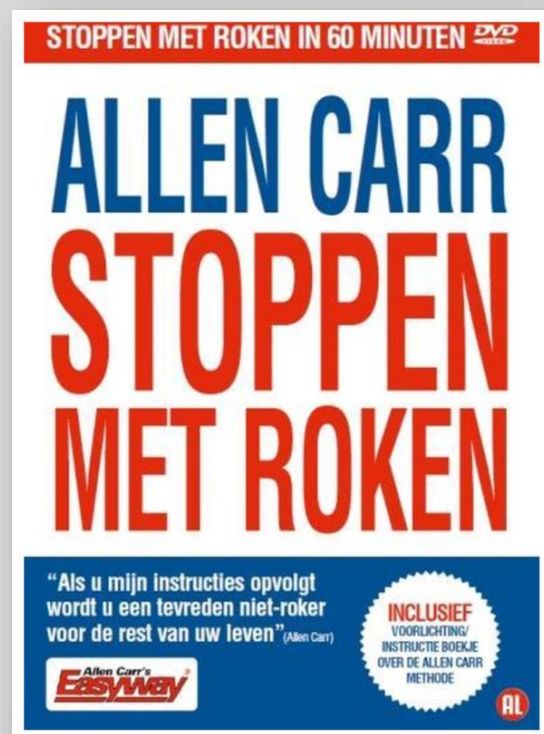
Verwachte voordelen
van **roken**

Stoppen met roken





determinanten van stoppen met roken





ADDICTION

RESEARCH REPORT

SSA SOCIETY FOR THE STUDY OF ADDICTION

doi:10.1111/add.14897

Comparison of Allen Carr's Easyway programme with a specialist behavioural and pharmacological smoking cessation support service: a randomized controlled trial

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ABSTRACT

Background and Aims A combination of behavioural and pharmacological support is judged to be the optimal approach for assisting smoking cessation. Allen Carr's Easyway (ACE) is a single-session pharmacotherapy-free programme that has been in operation internationally for 38 years. We compared the effectiveness of ACE with specialist behavioural and pharmacological support delivered to the national standard in England. **Design** A two-arm, parallel-group, single-blind, randomized controlled trial. **Setting** London, UK, between February 2017 and May 2018. **Participants** A total of 620 participants (310 in ACE and 310 in the combined behavioural and pharmacological support condition) were included in the analysis. Adult (≥ 18 years) smokers wanting to quit were randomized in a 1 : 1 ratio. Mean age for the total sample was 40.8 years, with 53.4% being male. Participant baseline characteristics (ethnicity, educational level, number of previous quit attempts, nicotine dependence) were evenly balanced between treatment groups. **Intervention and comparator** The intervention was the ACE method of stopping smoking. This centres on a 4.5–6-hour session of group-based support, alongside subsequent text messages and top-up sessions if needed. It aims to make it easy to stop smoking by convincing smokers that smoking provides no benefits for them. The comparator was a specialist stop smoking service (SSS) providing behavioural and pharmacological support in accordance with national standards. **Measurements** The primary outcome was self-reported continuous abstinence for 26 weeks from the quit/quit re-set date verified by exhaled breath carbon monoxide measurement < 10 parts per million (p.p.m.). Primary analysis was by intention to treat. Secondary outcomes were: use of pharmacotherapy, adverse events and continuous abstinence up to 4 and 12 weeks. **Findings** A total of 468 participants attended treatment (255 ACE versus 213 SSS, $P < 0.05$). Of those who did attend treatment, 100 completed 6-month measures (23.7% ACE versus 20.7% SSS). Continuous abstinence to 26 weeks was 19.4% (60 of 310) in the ACE intervention and 14.8% (46 of 310) in the SSS intervention [risk difference for ACE versus SSS 4.5% (95% confidence interval (CI) = -1.4 to 10.4% , odds ratio (OR) = 1.38)]. The Bayes factor for superiority of the ACE condition was 1.24. **Conclusion** There was no clear evidence of a difference in the efficacies of the Allen Carr's Easyway (ACE) and specialist smoking cessation support involving behavioural support and pharmacotherapy.

Allen Carr's Easyway to Stop Smoking - A randomised clinical trial

Sheila Keogan, Shasha Li, Luke Clancy

ABSTRACT

Objective To determine if Allen Carr's Easyway to Stop Smoking (AC) was superior to Quit.ie in a randomised clinical trial (RCT).

Setting Single centre, open RCT, general population based.

Participants 300 adult smokers, 18 years plus, minimum 5 cigarettes daily, and English speaking. AC, 151 (females 44.4%) and Quit.ie, 149 (females 45.6%), mean age 44 years. Outcomes for all 300 were analysed (intention-to-treat). Recruited through advertisement from July 2015 to February 2016.

Intervention Randomly assigned to AC ($n=151$) and Quit.ie ($n=149$), matched for age, sex and education. Block randomisation, enrolment and follow-up at 1, 3, 6 and 12 months. Primary aim was to determine if AC had higher quit rates than Quit.ie service at 3 months. Secondary aims: quit rates at 1, 6 and 12 months and analysis of associated factors including weight. AC consisted of a 5-hour seminar, in a group setting. Quit.ie is an online portal for smoking cessation.

Results AC had higher quit rates at 1, 3, 6 and 12 months. AC: 38% ($n=57$), 27% ($n=40$), 23% ($n=35$), 22% ($n=33$) vs Quit.ie: 20% ($n=30$), 15% ($n=22$), 15% ($n=23$), 11% ($n=17$), respectively (all p values < 0.05). Logistic regression AC vs Quit.ie, OR 2.26 (95% CI 1.22 to 4.21) p value = 0.01. Weight gain 3.8 kg in AC vs 1.8 kg in Quit.ie (p value < 0.05).

Conclusions All AC quit rates were superior to Quit.ie, outcomes were comparable with established interventions.

Trial registration number ISRCTN12951013. Recruitment July 2015–February 2016.

of the AC method.^{20–22} The scientific basis of the method is also unclear.²⁰ AC does not include pharmacotherapy, and the behavioural intervention does not seem to be based on the transtheoretical model of behaviour change.^{19,23}

In this study, we compare Allen Carr's Easyway to Stop Smoking (AC) with the National Online Smoking Cessation Service, Quit.ie, in a randomised clinical trial (RCT).

STUDY OBJECTIVES

The objectives were: to assess the relative effectiveness of AC and Quit.ie, using carbon monoxide (CO) validated Quit status at 1, 3, 6 and 12 months for each treatment condition, and to measure the continuous abstinence rate using Russell standard,²⁴ to consider non-quit outcomes and factors associated with successful quitting.

STUDY GOALS

To provide an evidence base with regard to the efficacy of the AC method for smoking cessation for smokers wishing to quit and also to inform policy-makers regarding its possible suitability for inclusion in publicly recommended smoking cessation treatment services.

METHODS

This study is an open, single-centre, randomised, superiority clinical trial with parallel group design using Consolidated Standards of Reporting Trials guidelines (online supplementary file 1). Patients



Dijkstra et al. *BMC Public Health* 2014, **14**:952
<http://www.biomedcentral.com/1471-2458/14/952>



RESEARCH ARTICLE

Open Access

The effectiveness of the Allen Carr smoking cessation training in companies tested in a quasi-experimental design

Arie Dijkstra^{1*}, Rixt Zuidema², Diederick Vos³ and Marike van Kalken⁴

Abstract

Background: The Allen Carr training (ACt) is a popular one-session smoking cessation group training that is provided by licensed organizations that have the permission to use the Allen Carr method. However, few data are available on the effectiveness of the training.

Methods: In a quasi-experimental design the effects of the existing practice of providing the ACt to smokers ($n = 124$) in companies on abstinence, were compared to changes in abstinence in a cohort of similar smokers in the general population ($n = 161$). To increase comparability of the smokers in both conditions, smokers in the control condition were matched on the group level on baseline characteristics (fourteen variables) to the smokers in the ACt. The main outcome measure was self-reported continuous abstinence after 13 months, which was validated using a CO measurement in the ACt condition.

Results: Logistic regression analyses showed that when baseline characteristics were comparable, significantly more responding smokers were continuously abstinent in the ACt condition compared to the control condition, $\text{Exp(B)} = 6.52$ (41.1% and 9.6%, respectively). The all-cases analysis was also significant, $\text{Exp(B)} = 5.09$ (31.5% and 8.3%, respectively).

Conclusion: Smokers following the ACt in their company were about 6 times more likely to be abstinent, assessed after 13 months, compared to similar smokers in the general population. Although smokers in both conditions did not differ significantly on 14 variables that might be related to cessation success, the quasi-experimental design allows no definite conclusion about the effectiveness of the ACt. Still, these data support the provision of the ACt in companies.

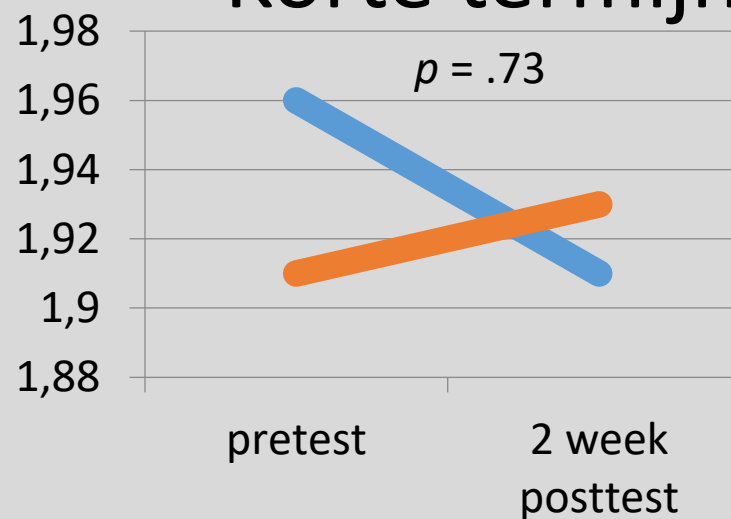
Keywords: Smoking cessation, Allen Carr training, Quasi-experimental, CO validation



Lange termijn



Korte termijn

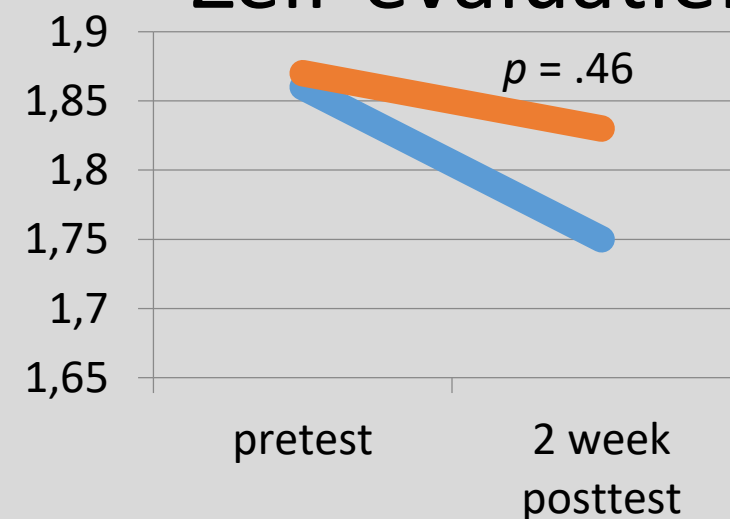


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— =control

Sociaal

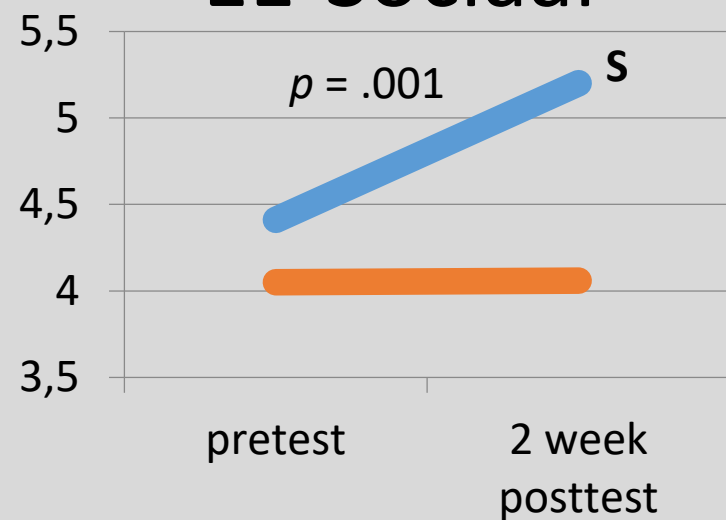


Zelf-evaluatief



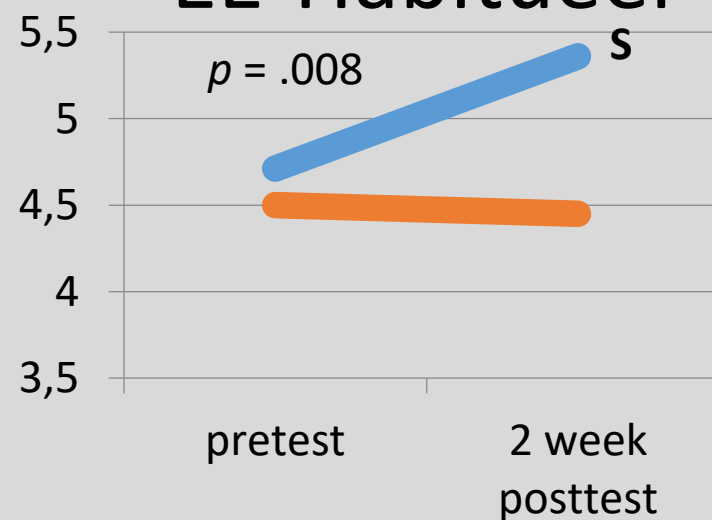


EE-Sociaal

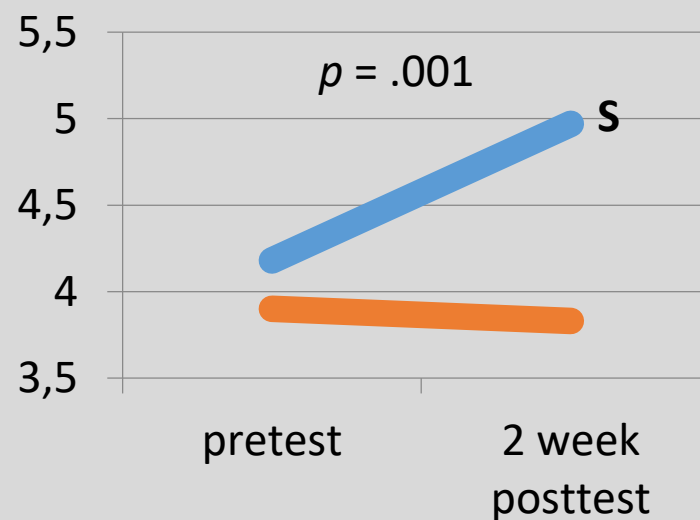


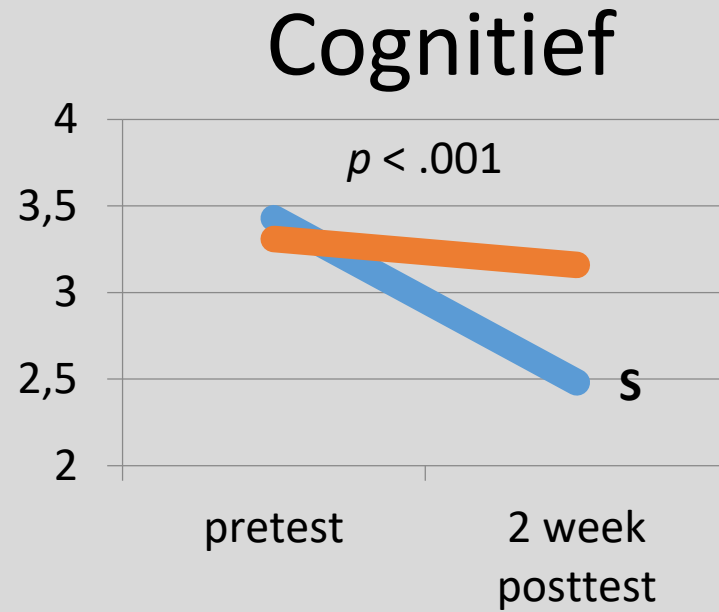
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EE-Habitueel

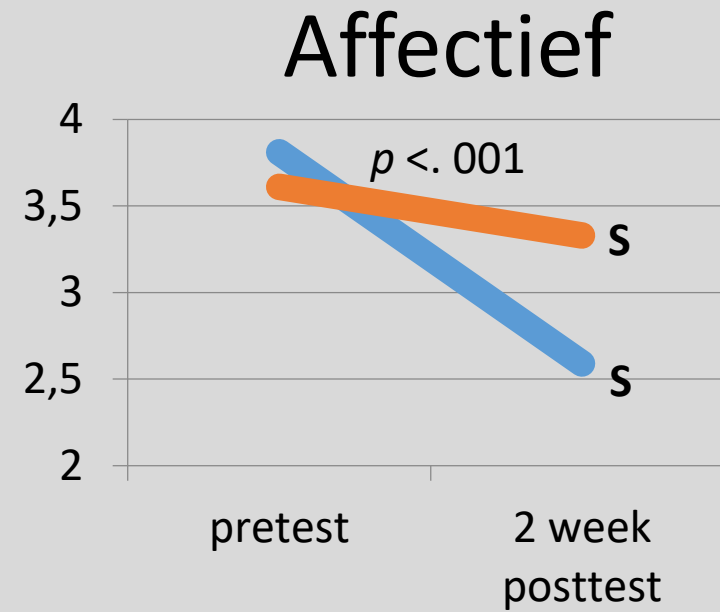


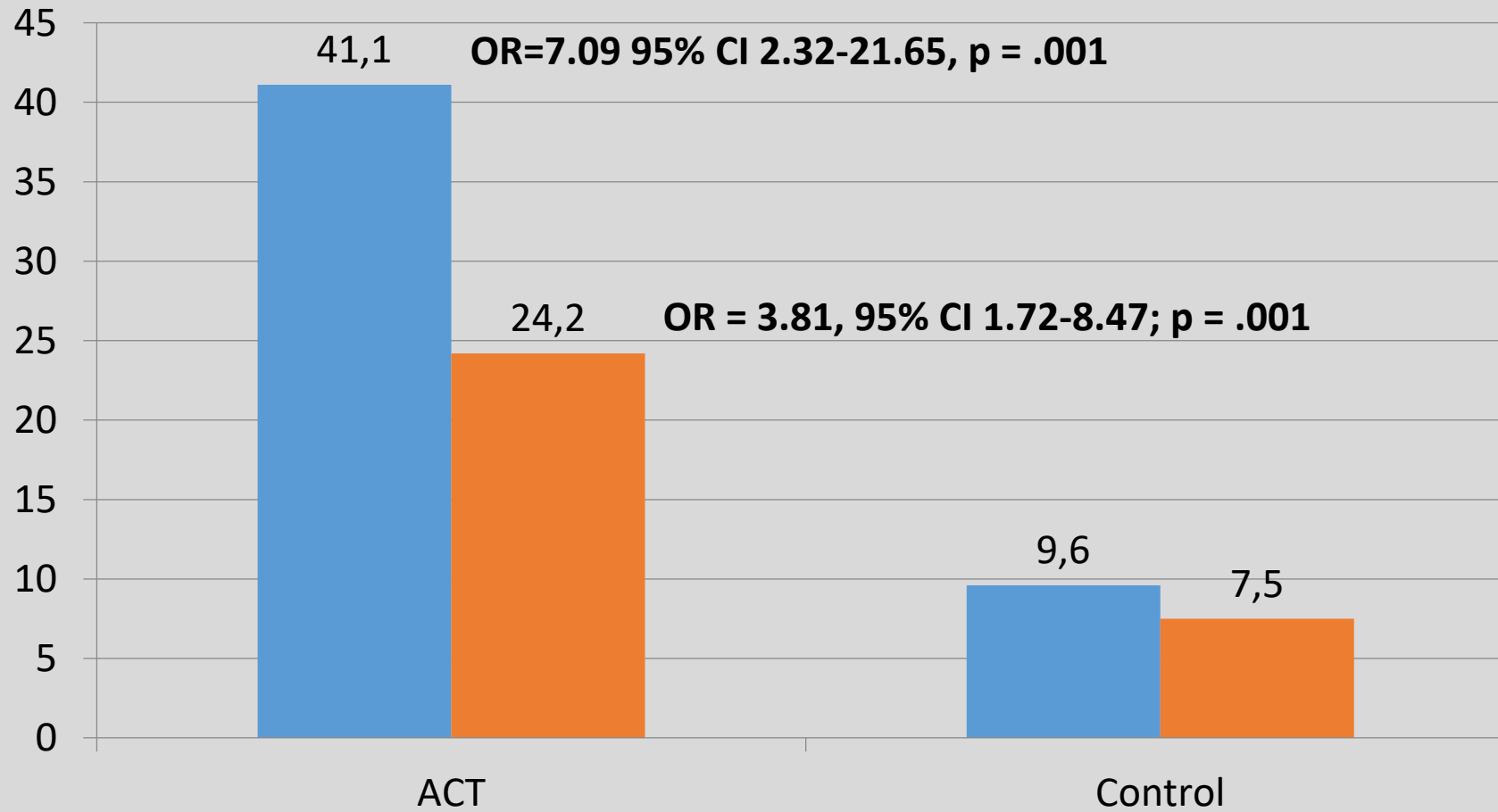
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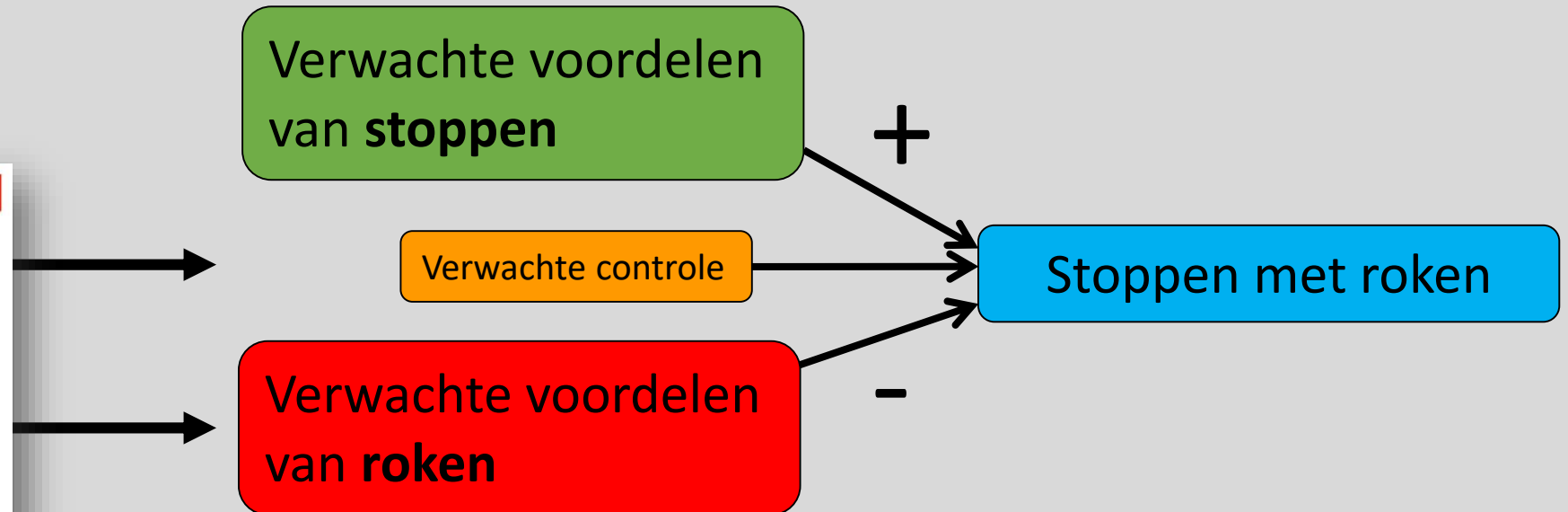
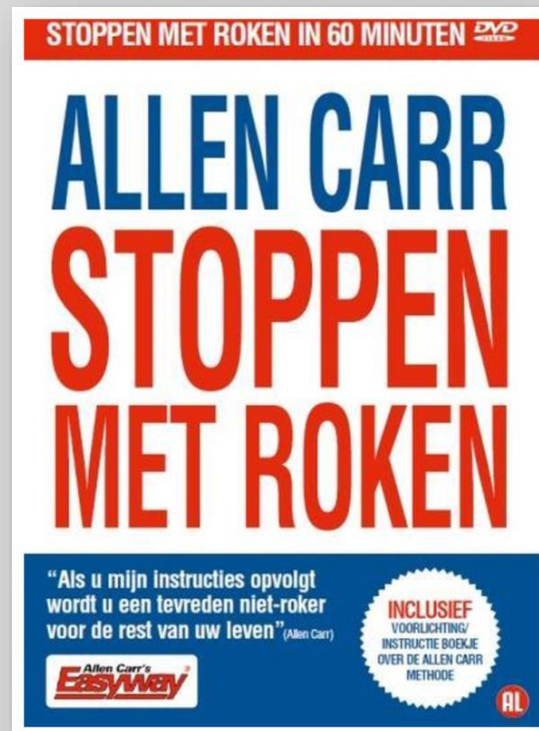
Eenvoudige observatie



Meest strenge, CO gevalideerd



determinanten van stoppen met roken



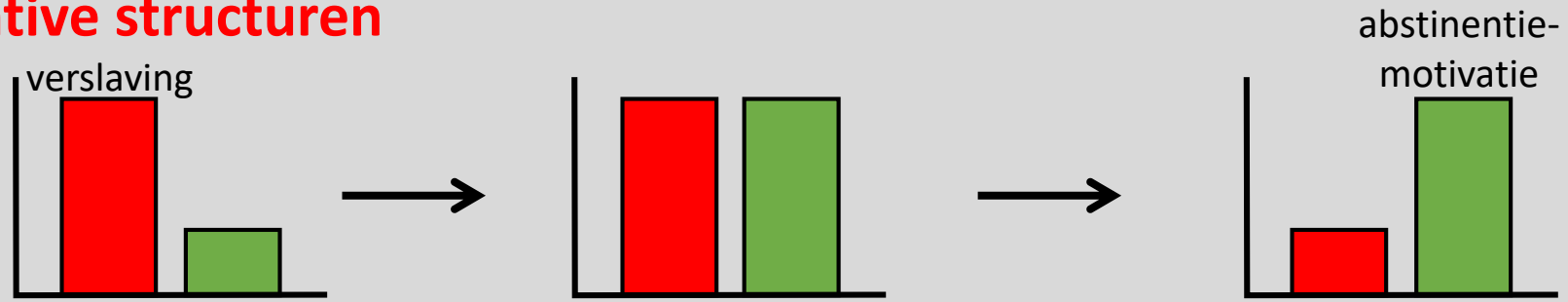


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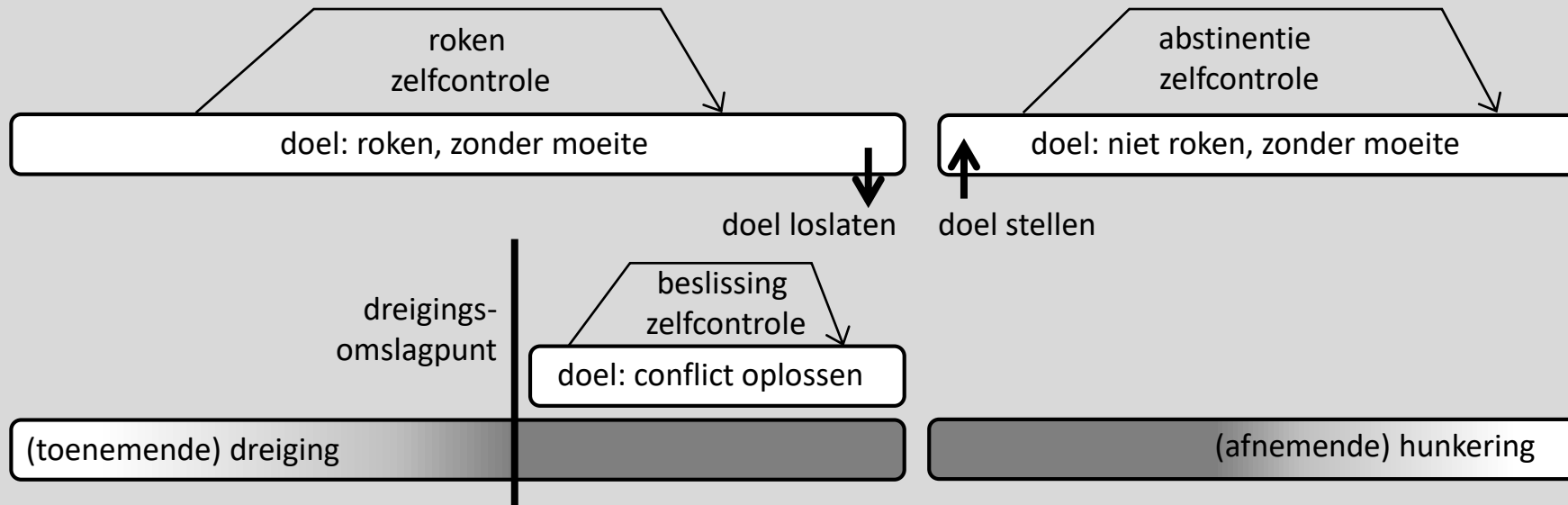


Annemieke Visser
Robert van de Graaf
Arie Dijkstra

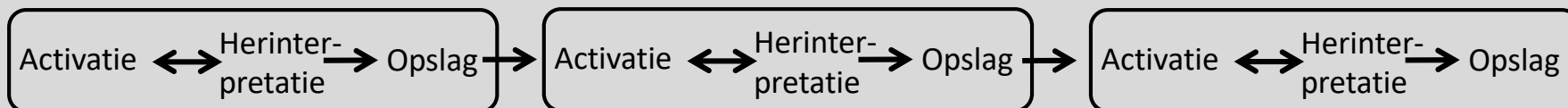
Incentive structuren



Zelfregulatie



Leren





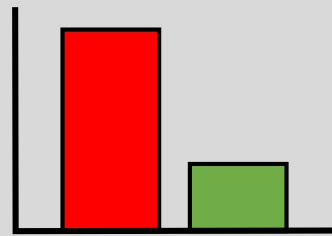
De ROLL-training

Op grond van de bovenstaande theorie kunnen de doelen van het onderstaande trainingsproces van verandering als volgt worden samengevat:

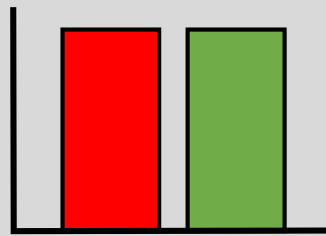
- 1) Het verzwakken/wegnemen van de incentive structuur van verslaving
- 2) Het versterken/aanbrengen van de incentive structuur van abstinentie motivatie

Dat wordt gedaan door:

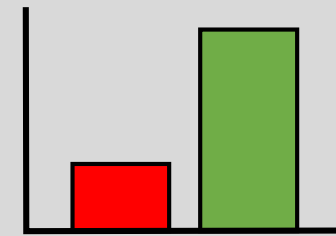
- 1) Het gepland veranderen van gedrag (zelfregulatie), wat bijdraagt aan:
- 2) Het leren



rookt



stoppen



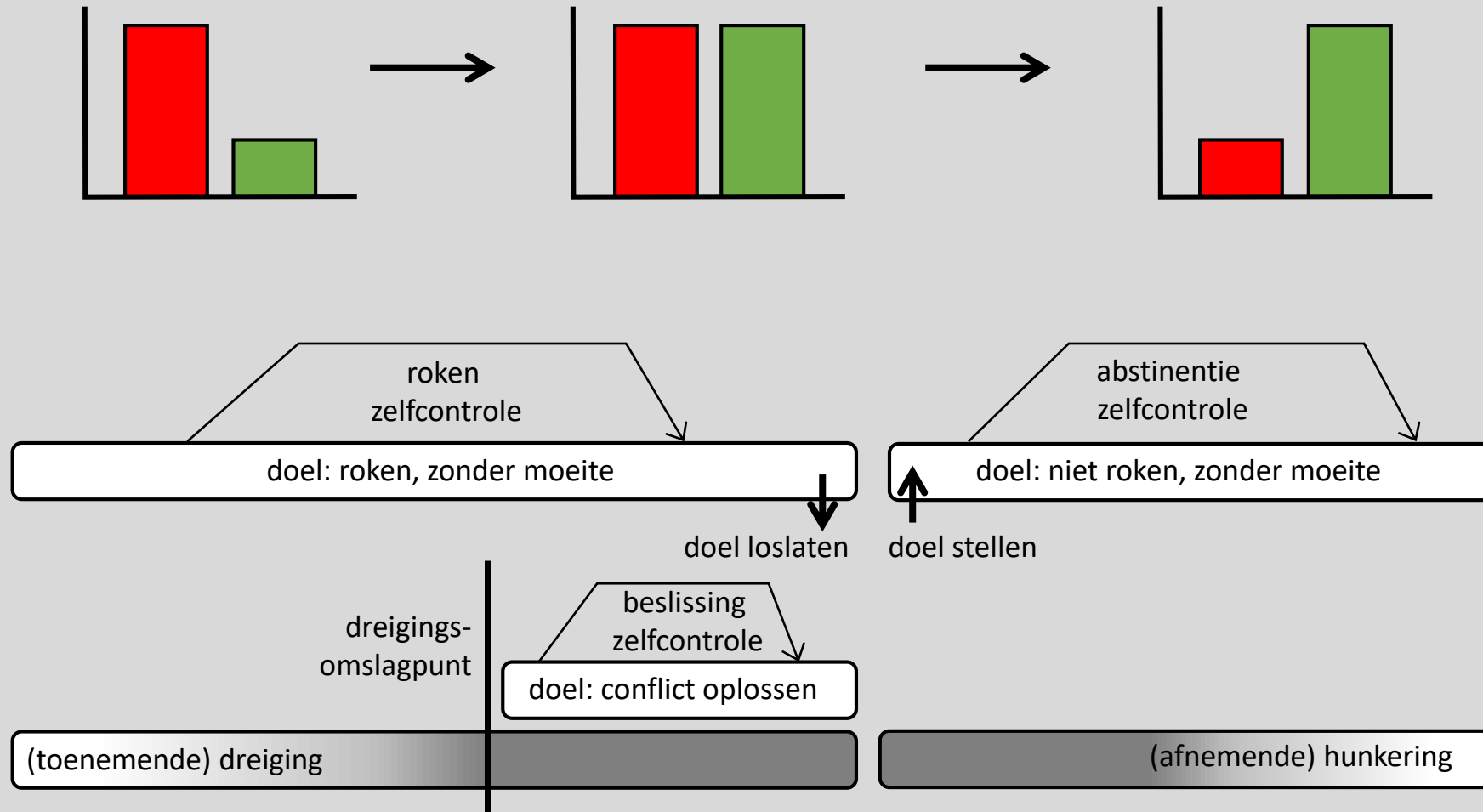
gestopt

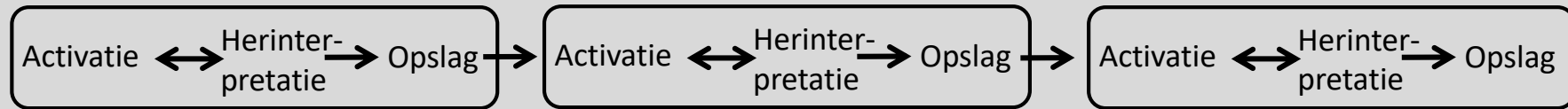


Incentive structuur verslaving



Incentive structuur abstinentie





rookt

gestopt



Activatie

Activeer geheugennetwerk

Laat monitoren/merken

Herinterpretatie/merging

Activeer bestaande info

Geef nieuwe info

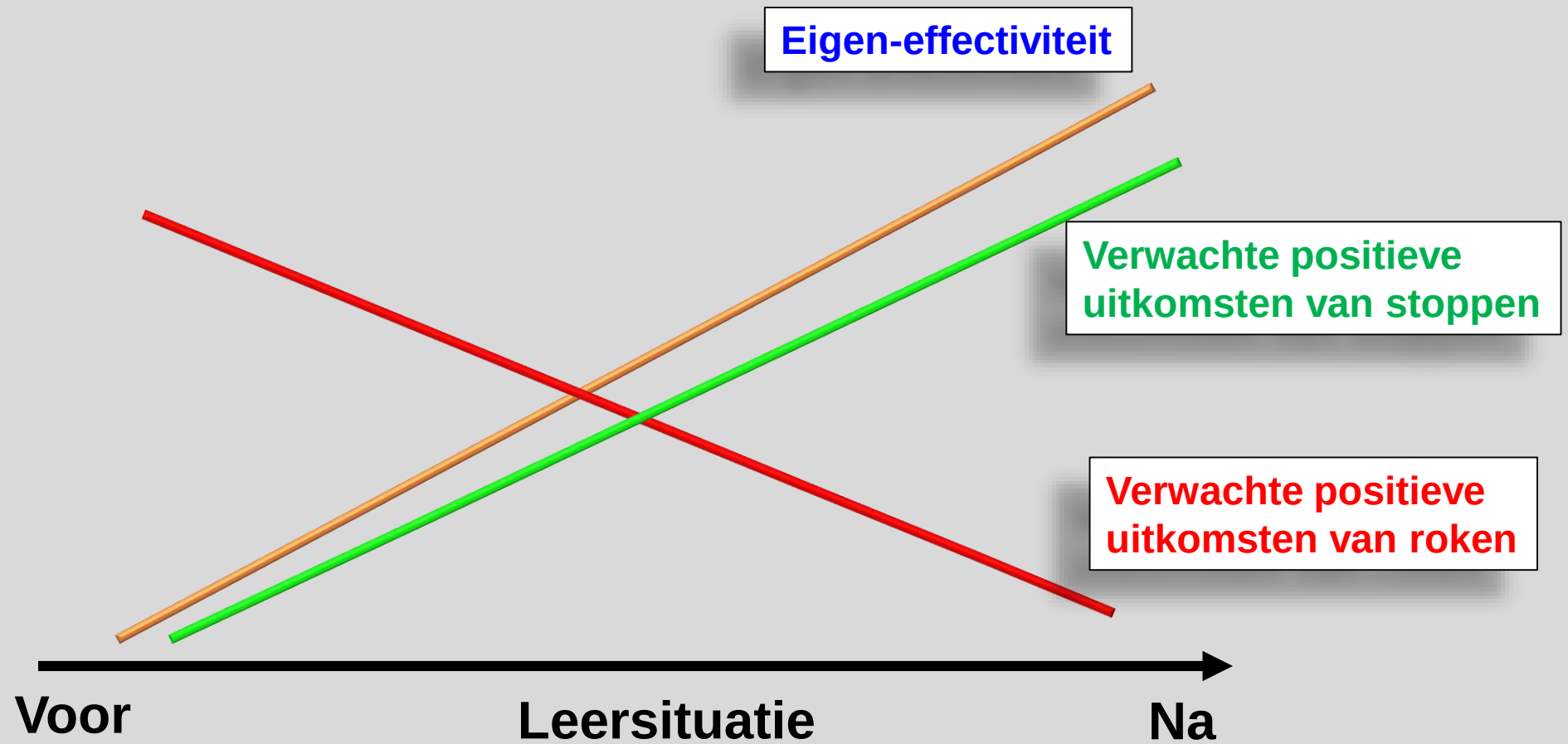
Focus op ervaring

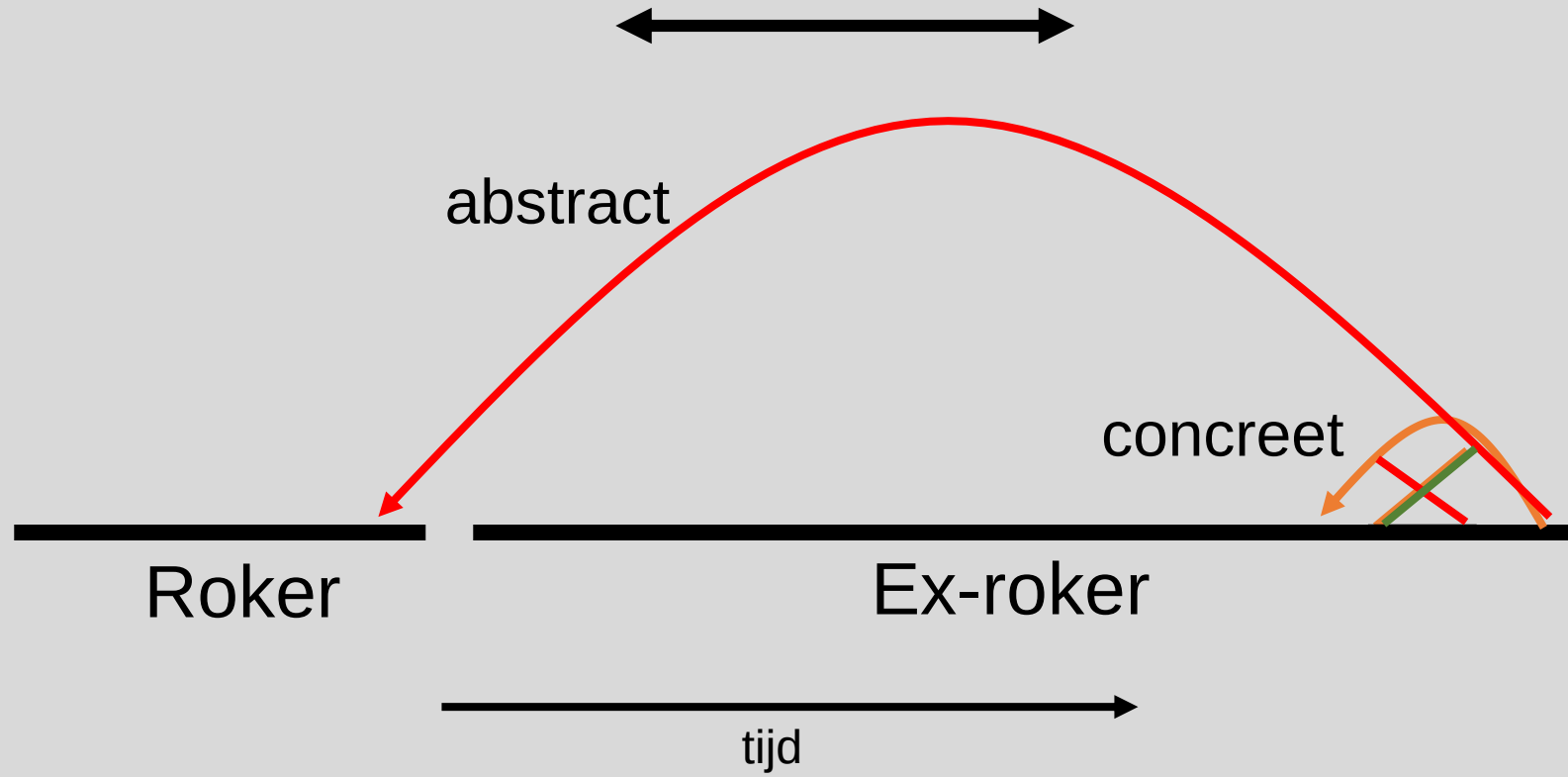
Opslag

Herhaling

Koppeling

Bekrachtiging







In vergelijking met toen u nog rookte

Bent u nu beter of slechter af?

Is uw leven nu meer of minder zinvol?

Is uw leven nu beter of slechter op orde?

Heeft u nu meer of minder positieve momenten in uw leven?

Veel beter/meer (1)

Veel slechter/minder (7)

Eigen-effectiviteit:

Denk u dat het u lukt om niet te roken als u...

-kwaad bent

-net gegeten hebt

-met vrienden bent

(7-puntsschaal)

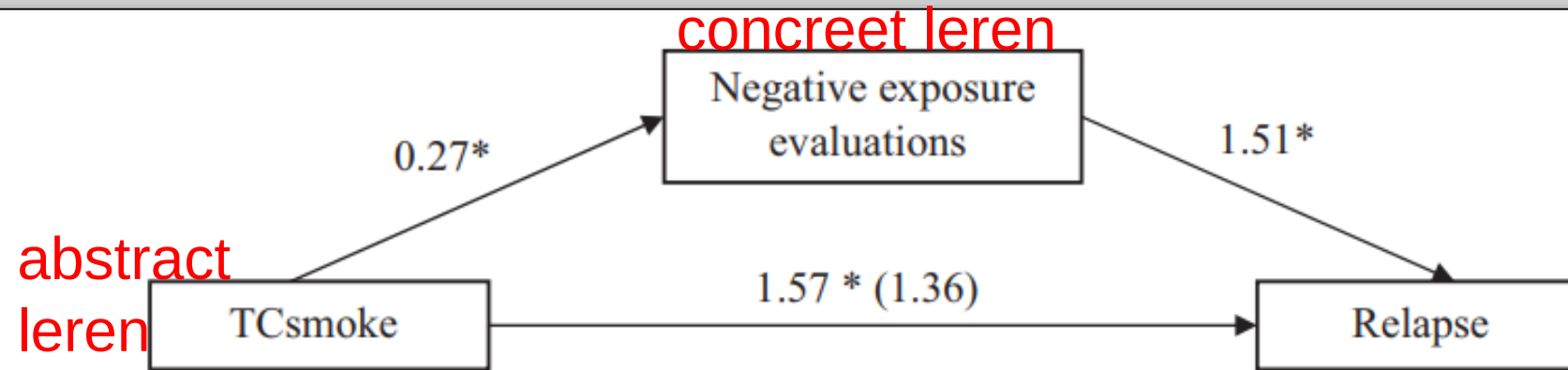


Figure 2. Mediation model with negative exposure evaluations as a mediator in predicting relapse at T2
Note: For the relation between TCsmoke and relapse, and the relation between negative exposure evaluations and relapse, (Exp)B's are reported. For the relation between TCsmoke and negative exposure evaluations, the Beta is reported.
* $p < .01$



