







# Motivation to stop smoking in the German population: recent trends and associated factors

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#### No conflicts of interest

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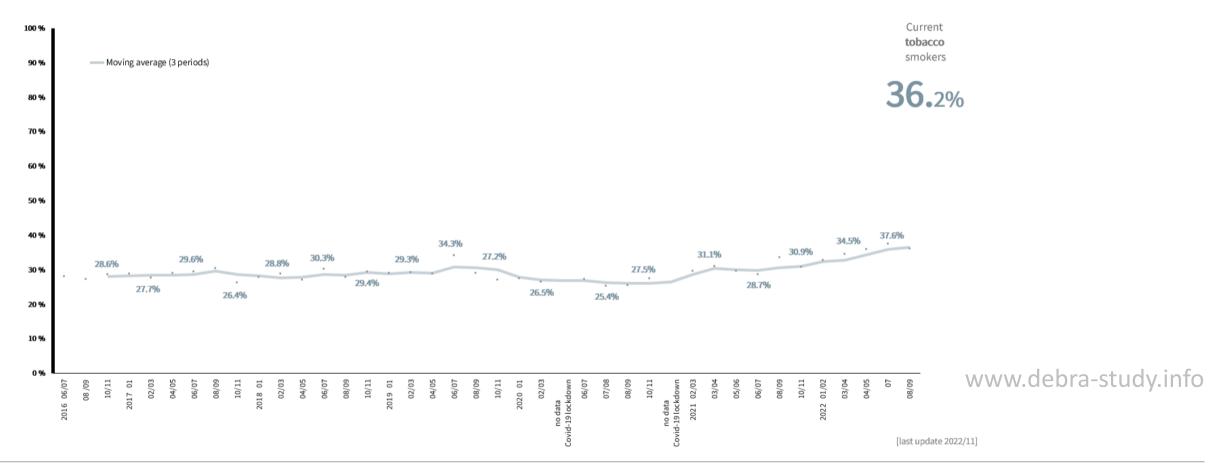






# **Background: smoking in Germany**

Prevalence of current tobacco smokers in Germany



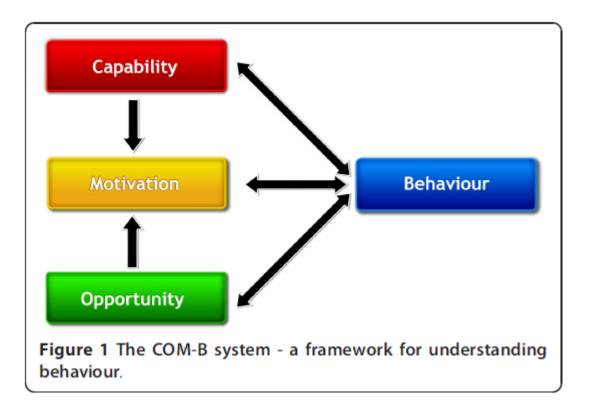








# **Background: theory of behaviour change**



#### Michie et al. Implementation Science, 2011









# **Background: theory of motivation**

## 3 key elements:

#### 1. Desires

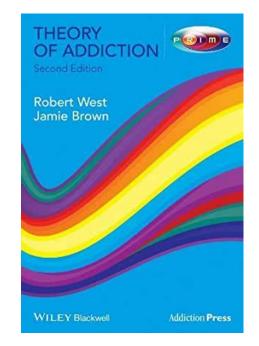
(e.g., desire to become smoke-free)

## 2. Beliefs

(e.g., belief smoking is unhealthy)

#### 3. Intentions

(e.g., plan to quit in coming month)











# **Background: Motivation To Stop Scale**

#### Which of the following describes you?

- **1** I don't want to stop smoking
- 2 I think I should stop smoking but don't really want to
- **3** I want to stop smoking but haven't thought about when
- 4 I <u>really</u> want to stop smoking but I don't know when I will
- **5** I want to stop smoking and hope to soon
- **6** I <u>really</u> want to stop smoking and intend to in the next 3 months
- 7 I <u>really</u> want to stop smoking and intend to in the next month

Desires Beliefs Intentions

Kotz et al. Drug and Alcohol Dependence, 2013









# **Background: relevance**

- Measuring motivation to stop smoking on a population level is useful to monitor the effectiveness of tobacco control interventions (if any)
- Knowing which factors are associated with motivation could help understanding differences in smoking cessation behaviour and designing interventions to reduce smoking in the population









# **Research questions**

#### 1. What has been the overall trajectory of motivation to stop among the German population and relevant subgroups over the past five years?

# 2. What factors are associated with the motivation to stop smoking?









# **Methods**

- Data from the German Study on Tobacco Use (www.debra-study.info; Kastaun et al. BMC Public Health, 2017)
- Face-to-face household surveys in random samples of approx. 2000 people every other month
- 33 survey waves used (June 2016 to November 2021)









# **Methods**

- 19,257 current smokers aged 18+ years
- Motivation To Stop Scale (MTSS), German version (Pashutina et al. Sucht, 2021)
  - Single-Item-Scale from 1 = lowest to 7 = highest level of motivation
- Statistical analysis:
  - Research question 1: descriptive, stratified by subgroups
  - Research question 2: multivariable ordinal regression
- Detailed study protocol published a priori on OSF (https://osf.io/qn6ts/)

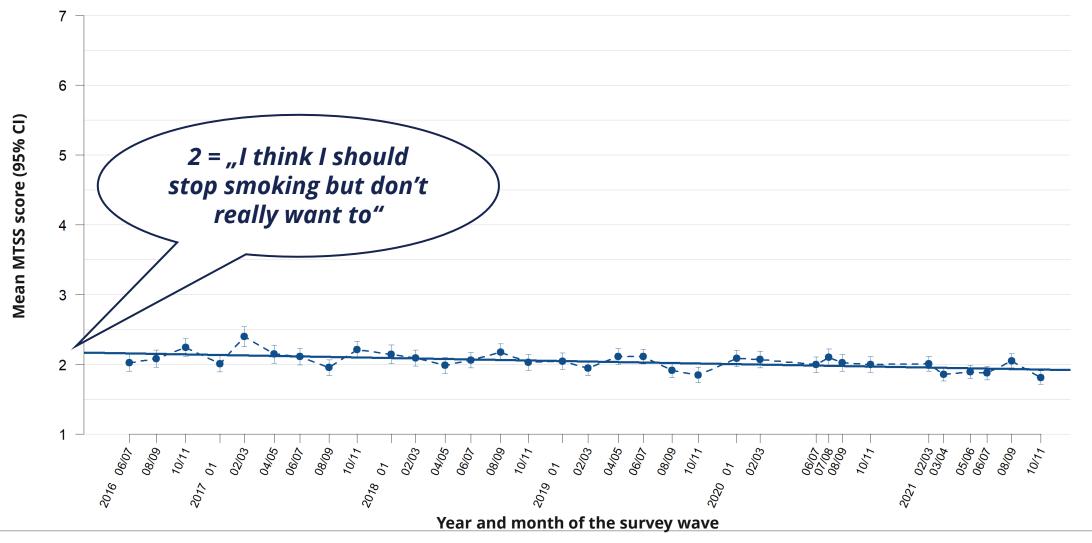








## **Results – trend overall**



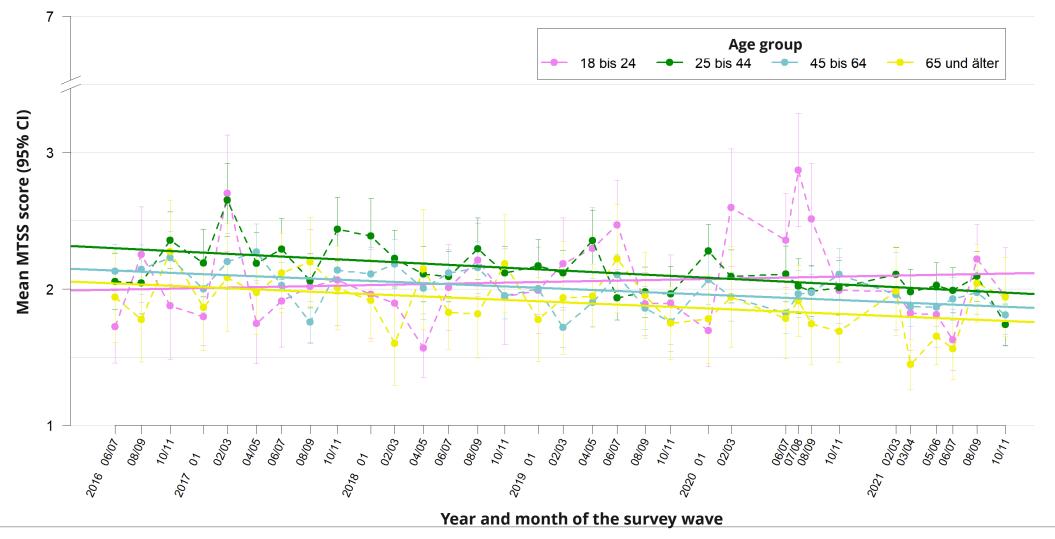








## **Results – trends by age**











# **Results – regression analysis**

Per increase in MTSS (1-7)
OR <sub>adj</sub> [95%CI]

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# Limitations and strengths

## • Limitations:

- Self-reported data
- Risk of recall bias

## Strengths:

- Representative sample
- Large sample size
- Repeated surveys
- Validated measure of motivation (Pashutina, Sucht, 2021)
- A priori study protocol published December 2021 (Open Science Framework Server <u>https://osf.io/qn6ts/</u>)











- More stringent tobacco control regulations generally needed to reduce smoking in population
- With regard to smoking cessation ...



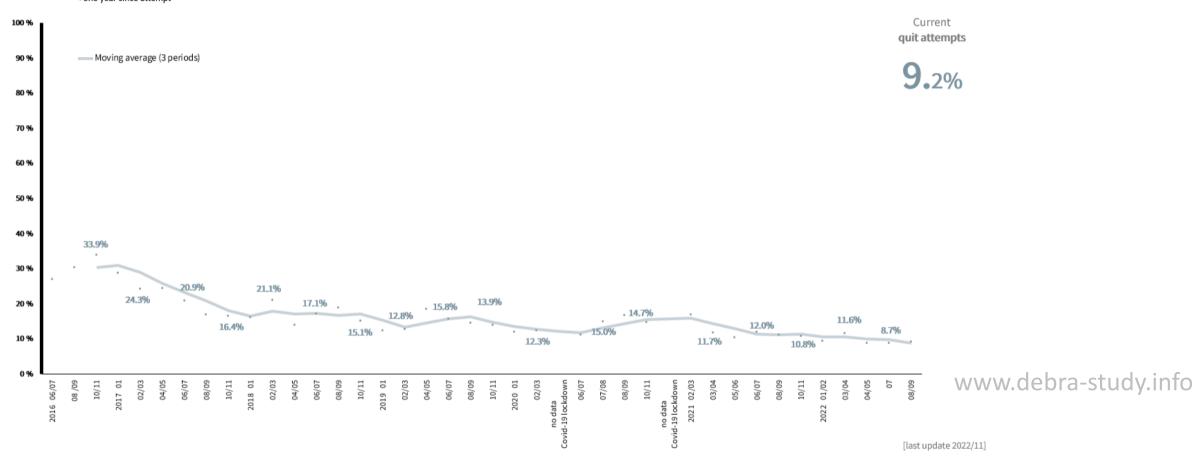






## Implications

Prevalence of **quit attempts**<sup>1</sup> in **current** and **recent ex-smokers**<sup>2</sup> in Germany <sup>1</sup> at least one serious attempt in past year <sup>2</sup> < one year since attempt











# Implications

- Improve smoking cessation support, e.g.
  - public campaigns regarding evidence-based treatments
  - reimbursement of the costs of such treatments
  - healthcare context: better implementation of brief smoking cessation advice (5As/5Rs, ABC)









# Many thanks for your attention

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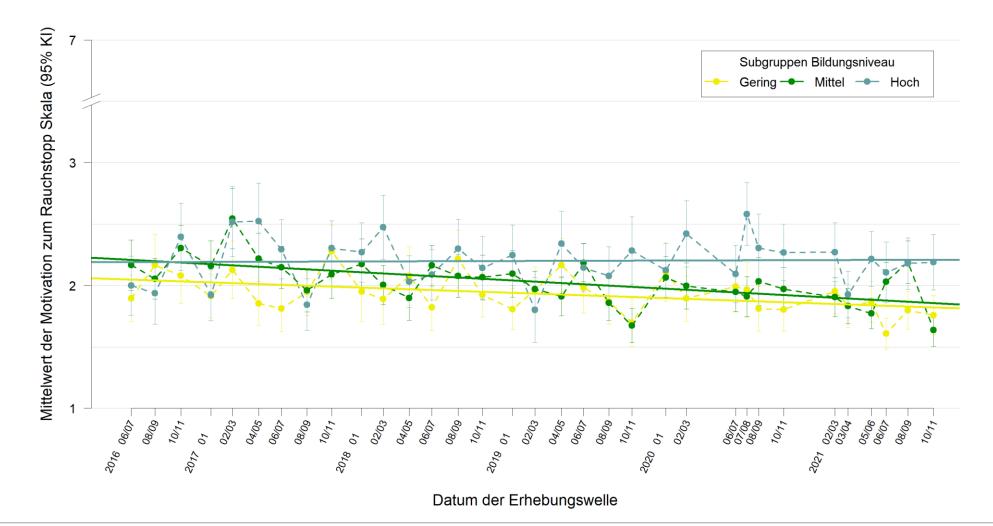








# **Ergebnisse – Trendanalyse nach Bildungniveau**



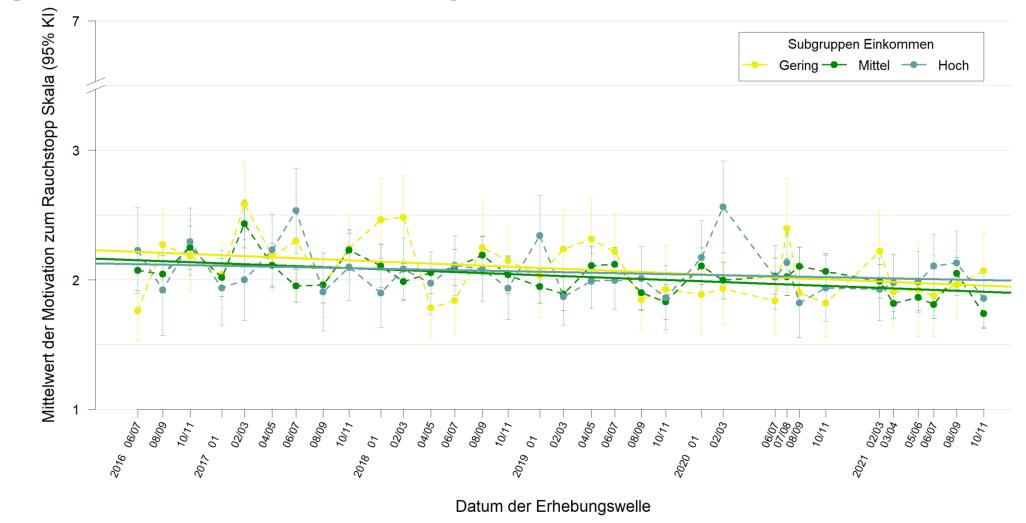








## Ergebnisse – Trendanalyse nach Einkommensniveau











# **Ergebnisse – Trendanalyse nach Geschlecht**

