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## **Group courses in the workplace are more successful than conventional therapies for smokers**

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### **Introduction**

Smoker's advice centres are having very little success with the population in general. The introduction of a ban on smoking in the workplace in the U.S. has led to a reduction in the prevalence of smoking and the success rates, at 34% are significantly higher than those achieved by pharmaceutical therapies<sup>1</sup>.

In Austria, workplace courses were recommended for the implementation of §30 AschG [Health and Safety at Work Act] to make it easier for smokers to give up.

### **Method**

After §30 AschG came into force and after carrying out some research into courses for smokers in Austrian companies, we decided to evaluate all group courses run by a comparable method (Allen Carr – Easyway) from June to September 2002. With the exception of two companies, which had already launched similar occupational health campaigns, all participants were requested to fill out standard questionnaires before the course began. After the basic session lasting six hours, two free booster sessions were offered, and a refund if the course did not succeed. The success of the course was measured after 3 and 12 months by computer-supported telephone interviews. Finally, course participants who did not originally submit a questionnaire were interviewed in the same way.

## Results

Women accounted for one third of the survey sample, which consisted primarily of white-collar workers (61%) and blue-collar workers (21%) with a vocational qualification (61%) aged between 20 and 59 (93%), who smoked on average >20 cigarettes a day before the course (men 29.3, women 24.3). 78% had already tried to give up, but only 15% had stopped for >1 year. Three months after the group course, 61.8% (57.3-66.3%) had not started smoking again and after one year 53.3 (48.2-58.4%) had remained abstinent.

## Discussion

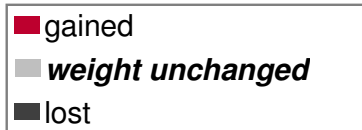
As only 1.6% used additional medication, this very high success rate (in comparison with conventional therapy) can be attributed solely to strengthened motivation. For 78% of the sample, one six-hour course was enough to achieve this, because motivation was maintained by group support. Where courses were held in the workplace, the take-up of booster sessions was lower and the success rate was 63.2% (57.6-68.8) after three months and 53.9% (47.5-60.3) after a year. The course participants who could not be contacted by telephone are unlikely to have affected the accuracy of the result as they did not form a distinct group, either socio-demographically (age, sex, marital status, education, occupation) or from the point of view of their smoking habits (number of cigarettes, pack years, Fagerström score, age on starting to smoke). Of the 42 workplace course participants who did not complete an questionnaire, 74% of those contactable by phone stated that they had remained abstinent for 3 months ( $77.4 \pm 14.7\%$ ) and for one year ( $48.4 \pm 17.6\%$ ). These non-respondents can therefore be excluded as a source of significant selection bias<sup>2</sup>. False statements cannot be ruled out, but in view of the refund guarantee, this is more likely to produce an underestimate of the success rate.

## Conclusions

These group courses are a suitable way of effectively reducing smoker rates in the workplace, improving the health and well-being of the workforce and smoothing the path to a smoke-free workplace.

# Weight change over time

Follow-up measurement after 12 months – non-smokers only  
 same structure

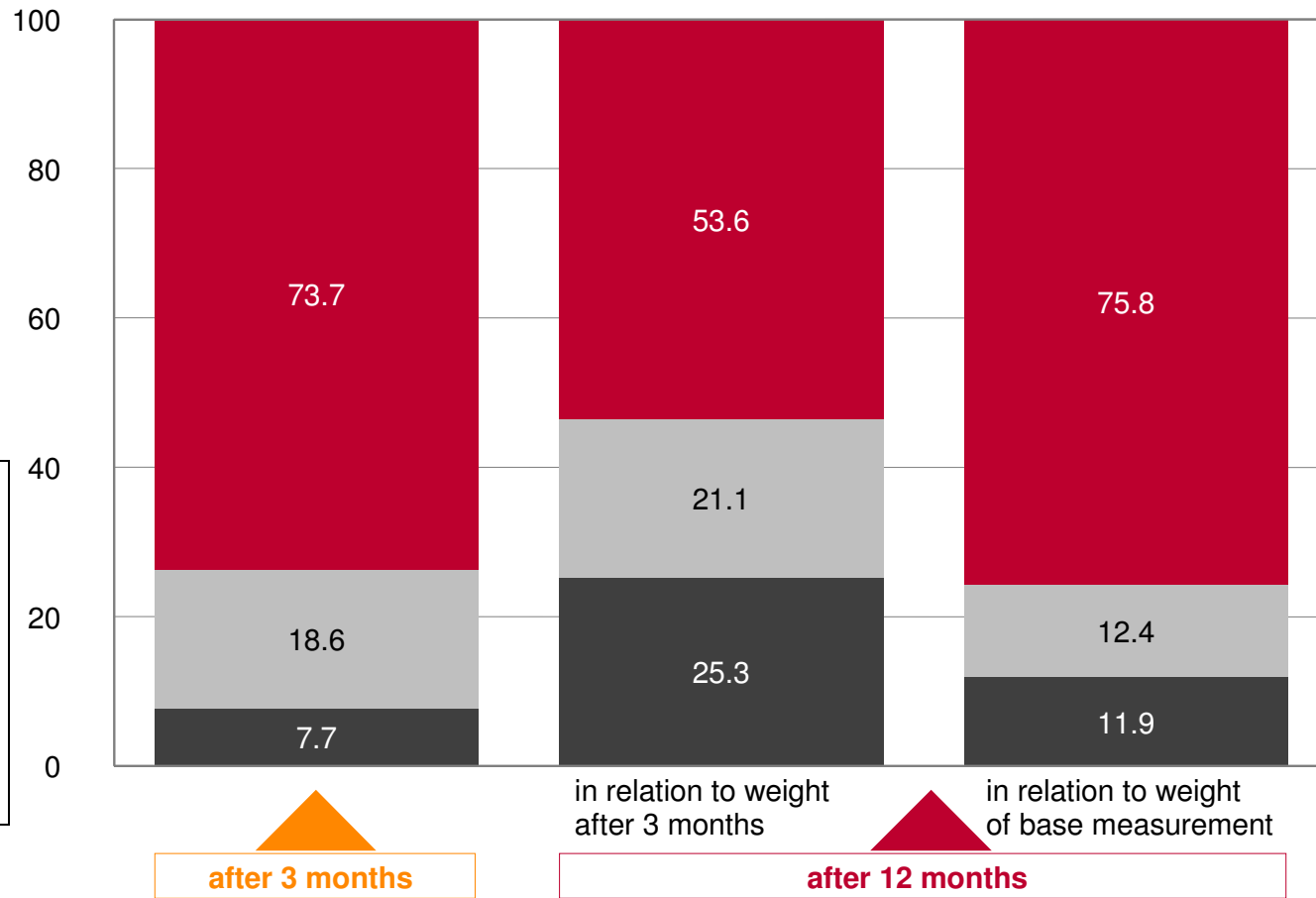


## Problem weight gain:

Whilst only half of relapsed smokers gained weight, ¾ of the successful ex-smokers gained an average of 2 kg, 1.6 kg of which were gained in the first three months.

Weight gain is often experienced in the withdrawal phase, although the risk of a heart attack is halved after one year of abstinence! However, as even weight gain that is undesirable for purely cosmetic reasons contributes to a relapse, particularly in women, it is important to avoid snacking and take more exercise during this phase.

change in weight

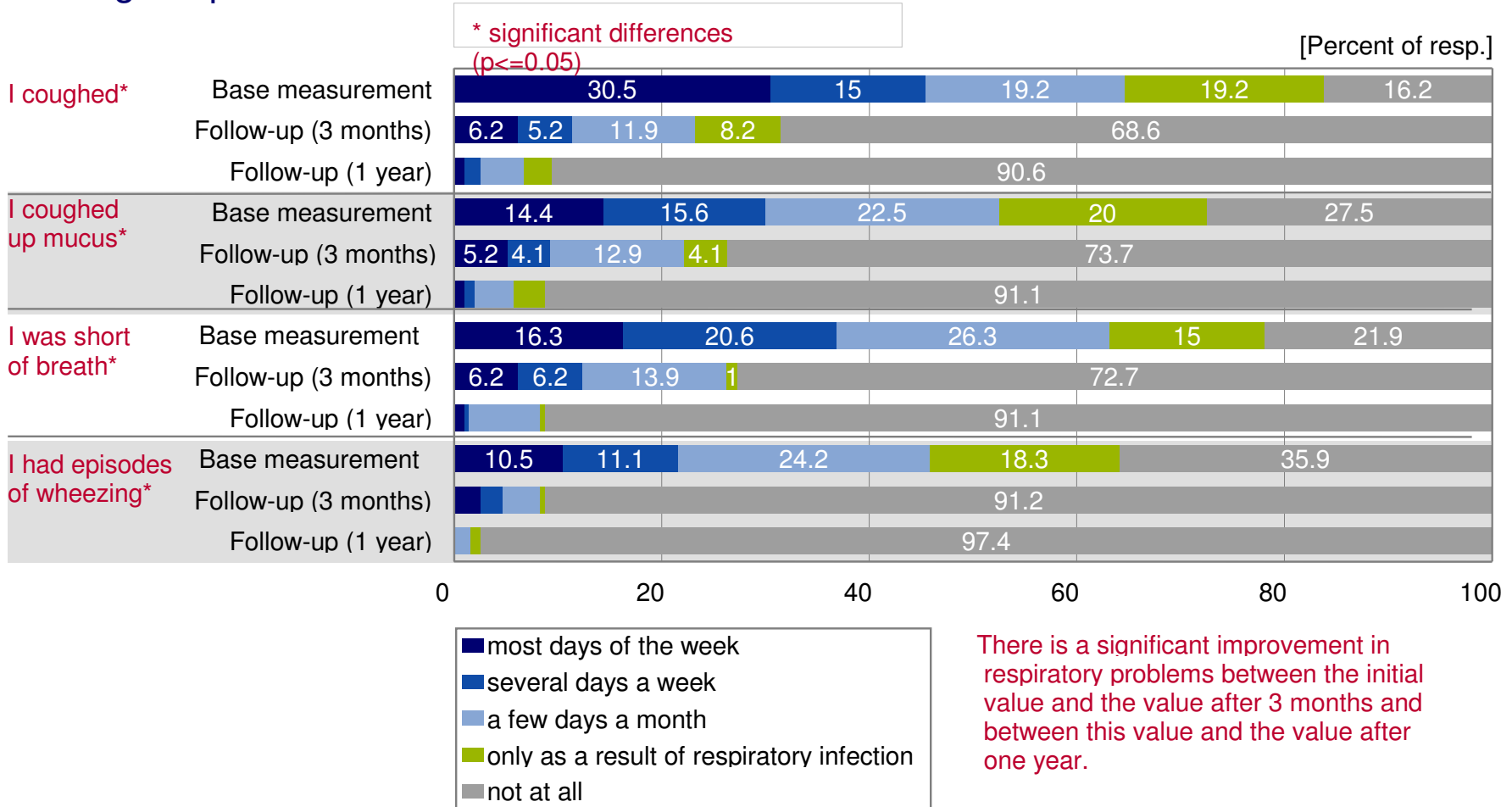


Sample: n=194 (successful non-smokers only)

# Frequency of respiratory problems

Comparison of three measurements – non-smokers only (after 12 months)

“During the past three months



Sample: n=194

(only successful non-smokers - after 12 months)

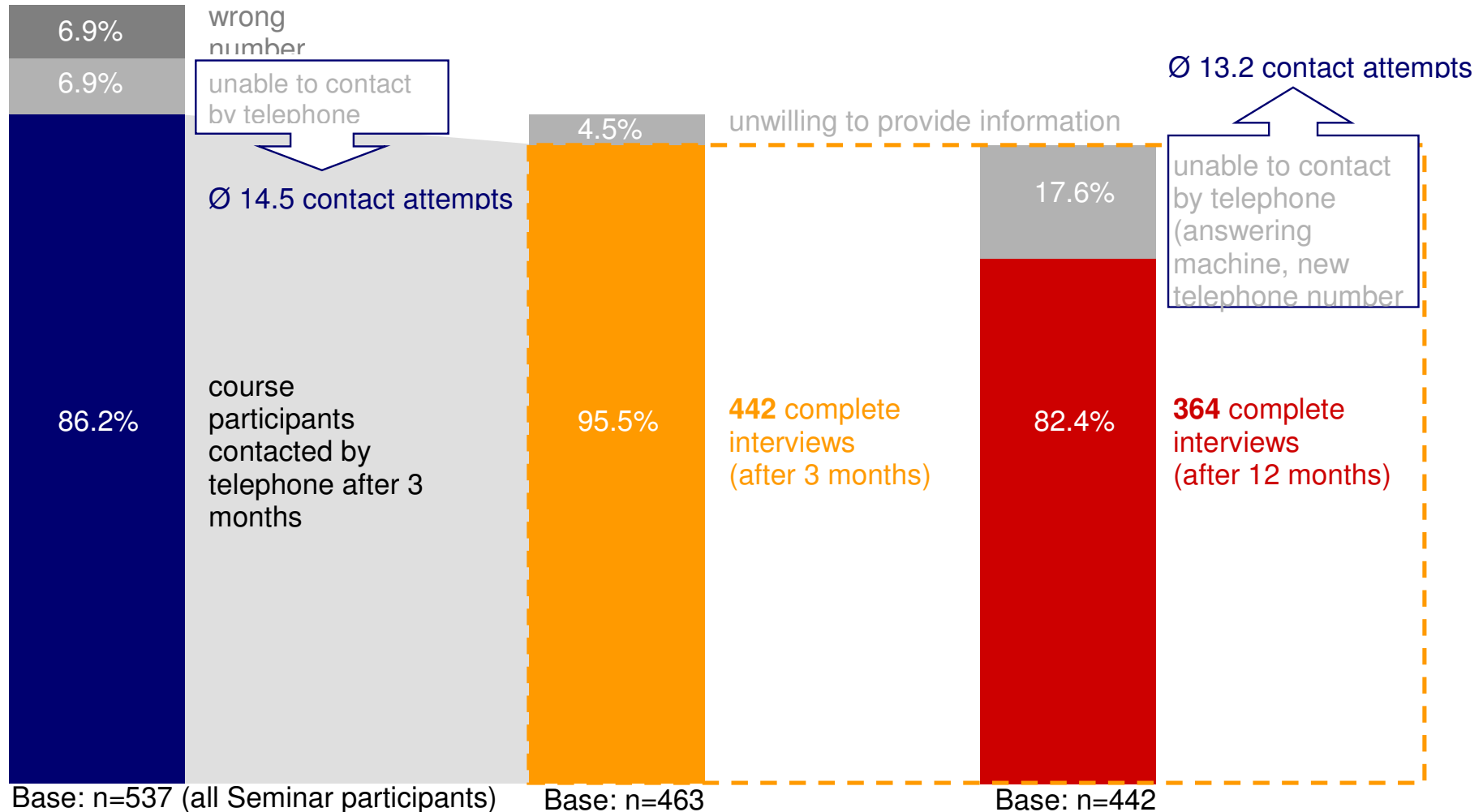
# Establishing the sample

## Base data

Course participants contacted by telephone after 3 months

Sample after 3 months

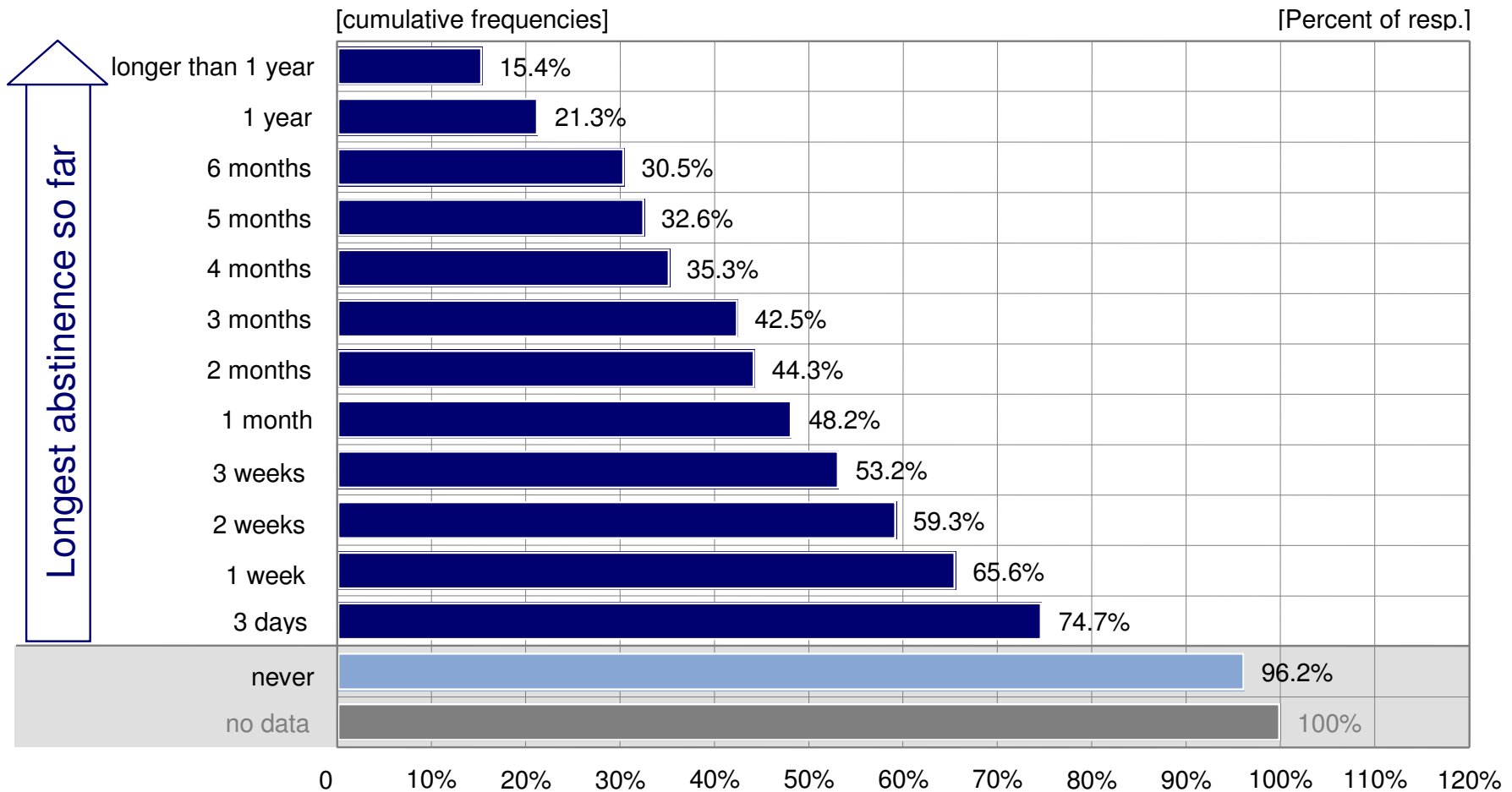
Sample after 12 months



# Period of abstinence – cumulative

Base measurement: Previous attempts to give up (mostly with nicotine substitute)

"What is the maximum length of time you managed to go without smoking during these attempts?"



Sample: n=442

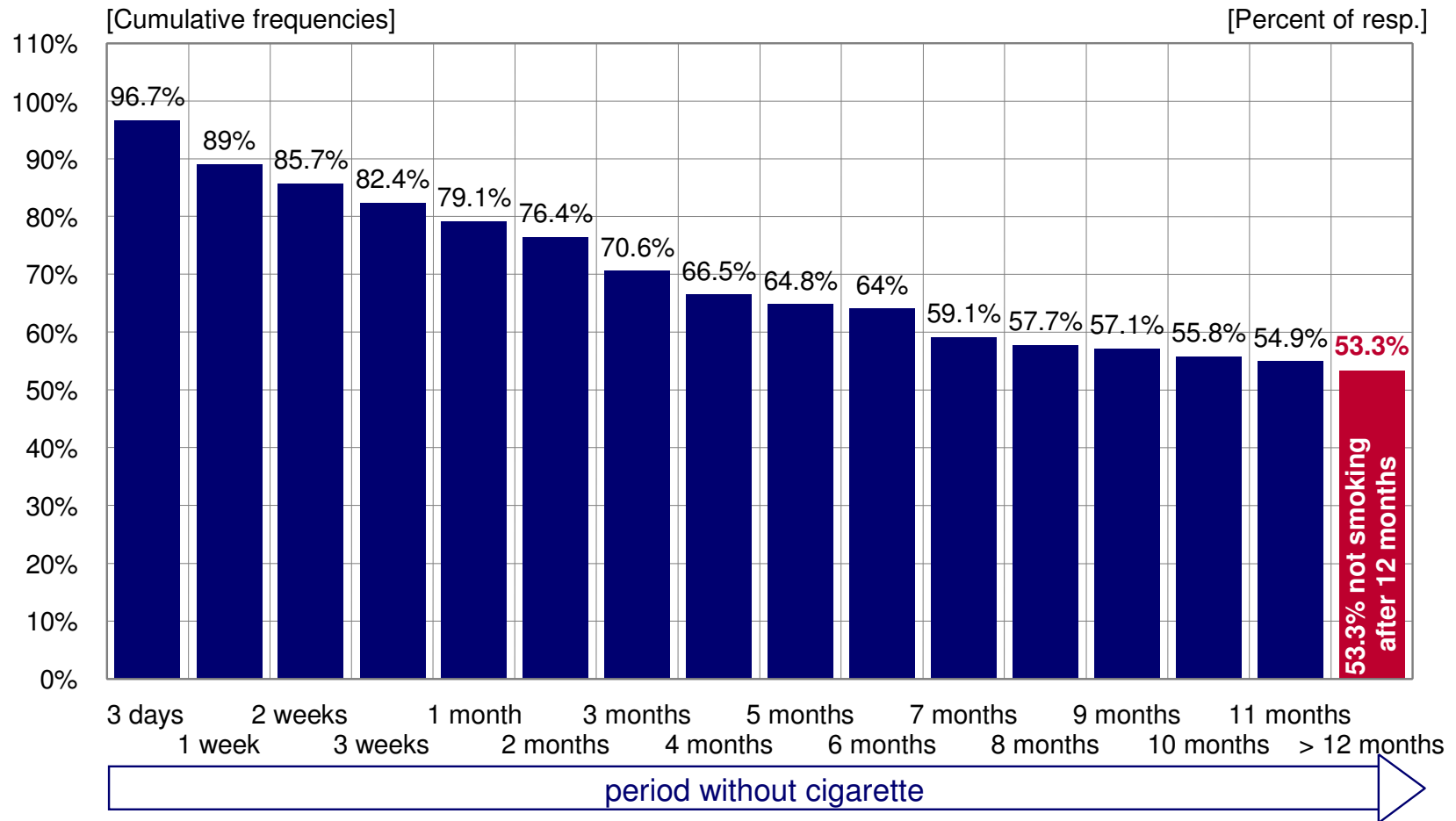
8 out of 10 course participants had already tried to give up, ¾ of them more than once

# Length of abstinence – cumulative frequencies

Follow-up measurement after 12 months

“How long did you go without smoking?”

Course success

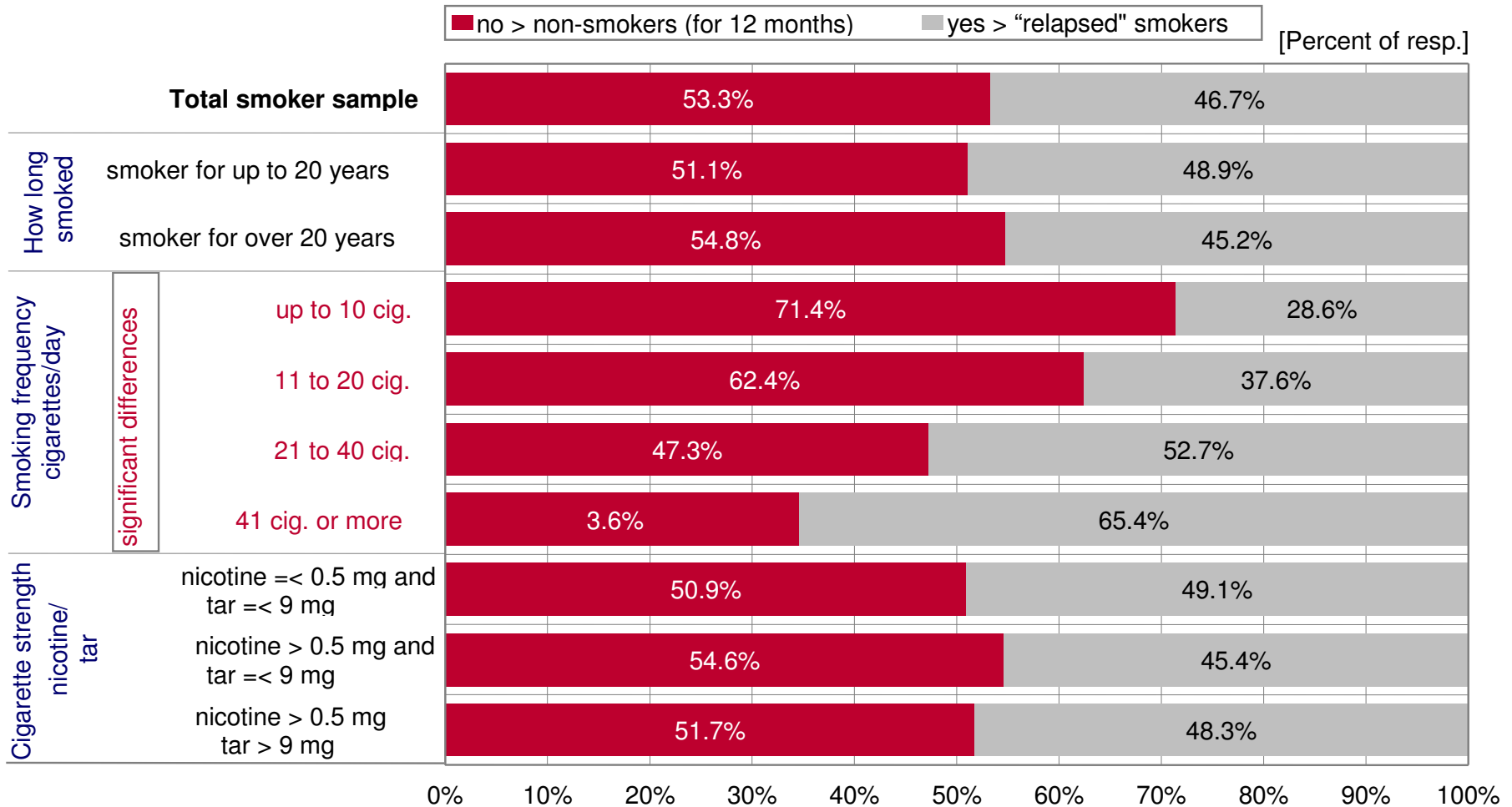


Sample: n=364

# Success rate after 12 months

## Follow-up measurement – distribution by smoking behaviour

“Have you started smoking again?”



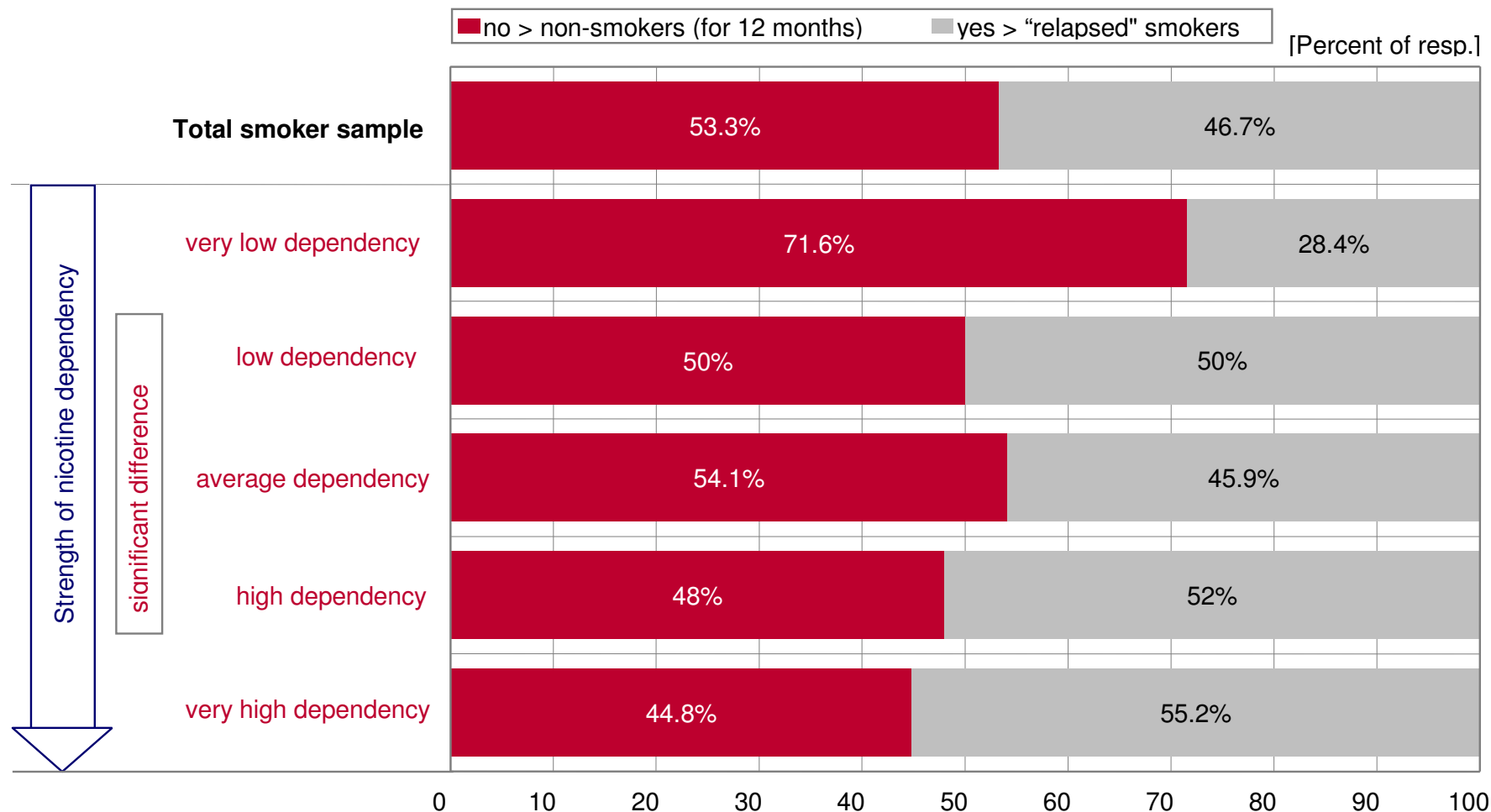
Sample: n=364 (146/218) (21/133/184/26) (53/108/174)



# Success rate after 12 months

Follow-up measurement – distribution by nicotine dependency (Fagerström score)

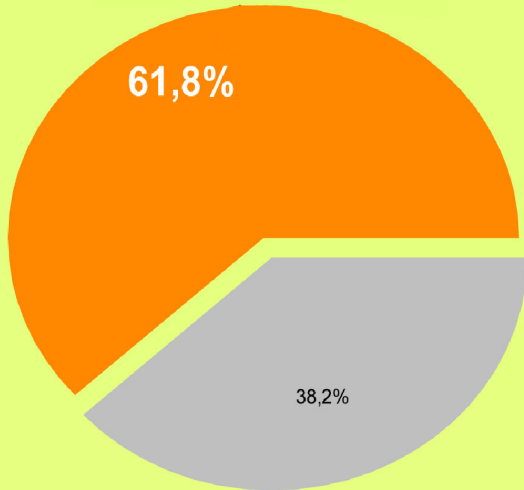
“Have you started smoking again?”



Sample: n=364 (67/74/61/102/58)

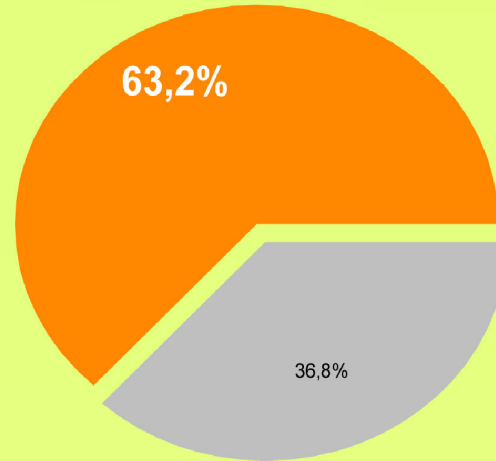
success rate after 3 month

all group courses (n=442/364)



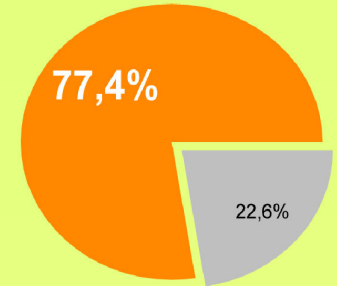
maximum range +/- 4,5%

corporate courses (n=280/232)



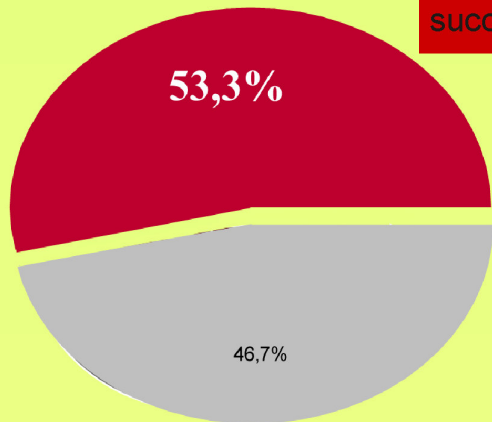
maximum range +/- 5,6%

nonresponder (n=33)

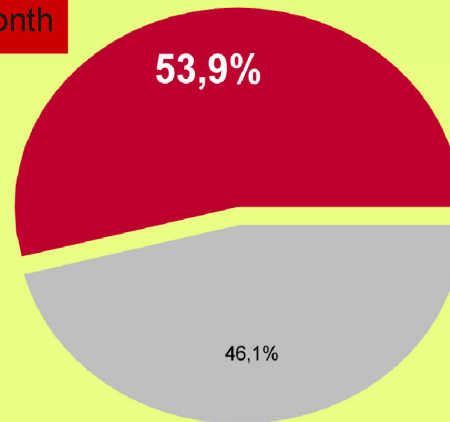


maximum range +/- 14,7%

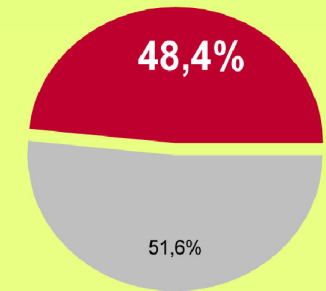
success rate after 12 month



maximum range +/- 5,1%



maximum range +/- 6,4%

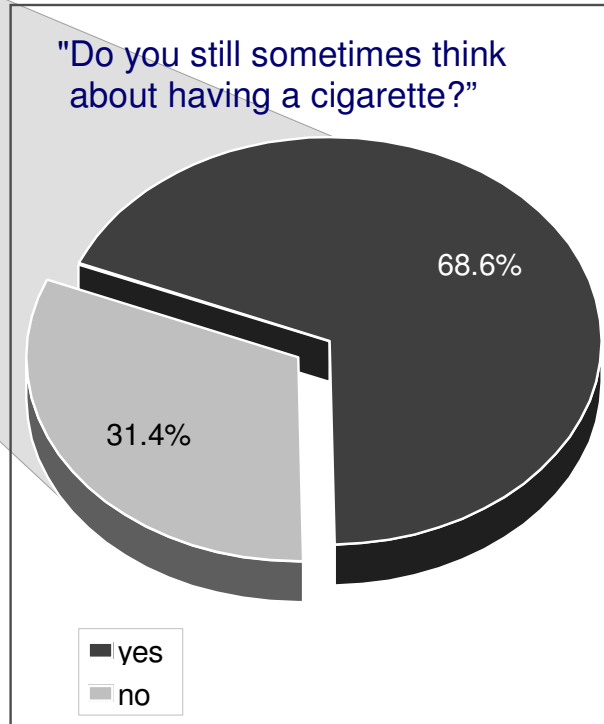
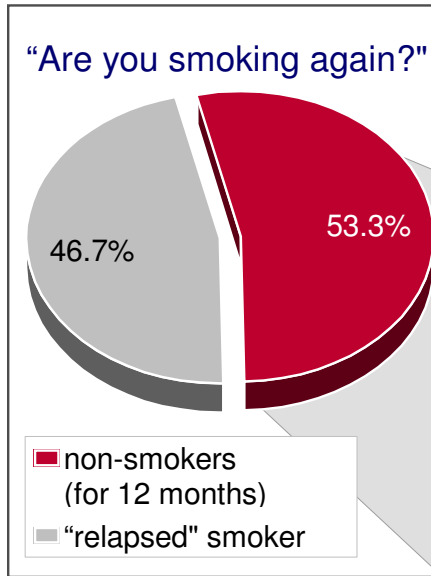


maximum range +/- 17,6%

red / orange: nonsmoker  
grey: backdue smoker

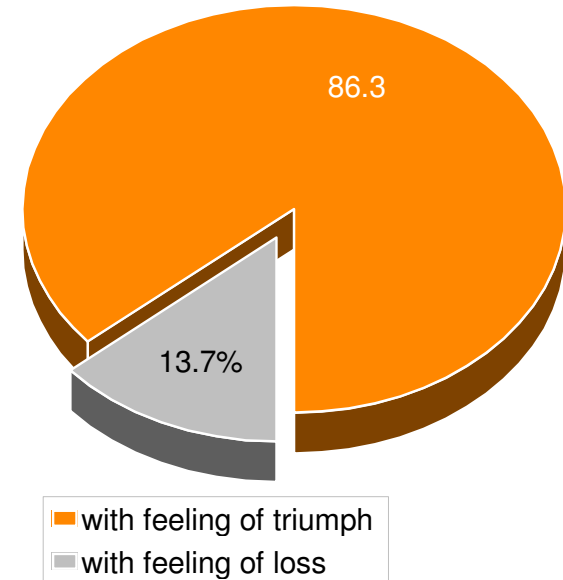
# How do you feel about cigarettes now?

Follow-up measurement after 12 months - non-smokers only



[Percent of resp.]

"Can you tell me how you feel about cigarettes now? Do you have a feeling of loss or of triumph and satisfaction that you're no longer smoking?"



## How do you achieve long-term success?

The course takes away the fear of giving up and group support reduces the risk of a relapse. Respiratory and other symptoms disappear. Ex-smokers increasingly feel healthier (physically and mentally according to the Health Survey SF-36). If they think about cigarettes at all, it's with a sense of having gained something (freedom, health, well-being, productivity, etc).

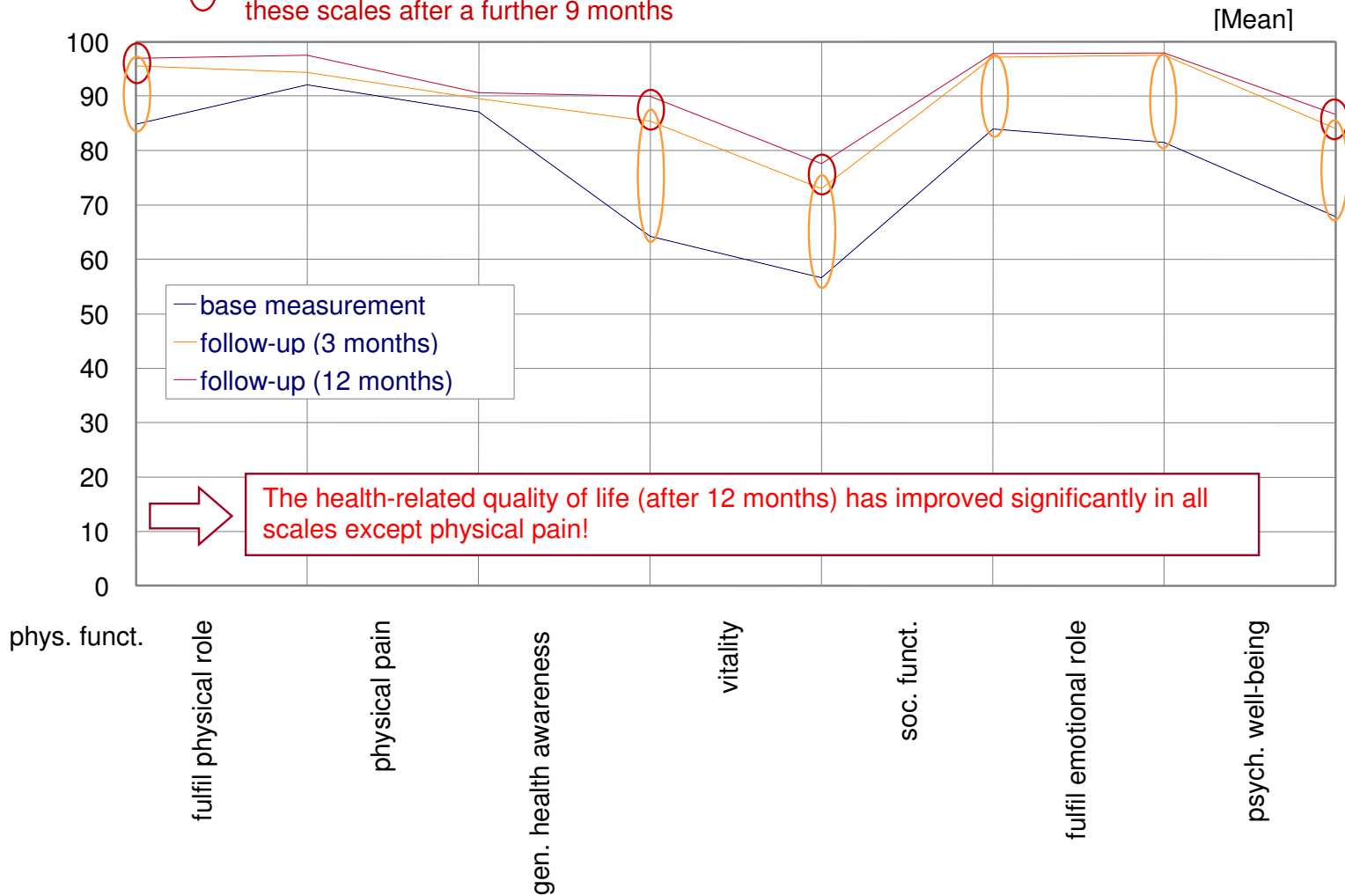
Sample: n=364/194/133

# Health-related quality of life over time

non-smokers only

○ Significant improvement in the health-related quality of life in these scales in the first 3 months

○ Significant improvement in the health-related quality of life in these scales after a further 9 months



Sample: n=194

Health Survey "SF 36"