

# External validation of the Motivation to Stop Scale (MTSS): findings from the International Tobacco Control (ITC) Netherlands Survey

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## **Abstract**

**Background:** The Motivation To Stop Scale (MTSS) is a single-item instrument which has been shown to predict quit attempts in the next 6 months in a previous validation study conducted in England. The aim of the current study was to determine the external validity of the MTSS among Dutch smokers in predicting quit attempts in the next 12 months. A secondary aim was to compare the discriminative accuracy of the MTSS with that of a Stages of Change assessment.

**Methods:** We analysed data from three consecutive waves of the International Tobacco Control (ITC) Netherlands Survey ( $n = 1272$ ). We conducted logistic regression analyses with the baseline score of the MTSS (measured in 2012 or 2013) predicting a quit attempt in the next 12 months (measured in 2013 or 2014). We furthermore compared the area under the Receiver Operating Characteristics (ROCAUC) curves of the MTSS and a Stages of Change measure.

**Results:** A total of 450 smokers (35.4%) made a quit attempt between baseline and 12-month follow-up. The regression analysis showed a positive relationship between scoring on the MTSS and quit attempts (odds ratio = 18.15, 95% confidence interval = 8.12–40.58 for the most vs. least motivated group). The discriminative accuracy of the MTSS (ROCAUC = 0.68) was marginally higher than that of a Stages of Change assessment (ROCAUC = 0.65), but not statistically significant ( $P = 0.21$ ).

**Conclusion:** The MTSS is an externally valid instrument to predict quit attempts in the next 12 months.

## **Recommended Citation**

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