In addition to expectancy and conditioning, motivation has been proposed as a mechanism underlying placebo effects. However, the role of motivation in placebo responding has not been adequately tested. Induction of high and low motivation to respond to a placebo cigarette in smokers has not been demonstrated. Little is known about the effects of open label placebos.

In a laboratory session, 1 hour long, motivation was manipulated via scripts that described positive inductions of high motivation to respond to a placebo cigarette. Between Time Spent Smoking, High Motivation group reported greater cravings to smoke a placebo cigarette than Low Motivation group. Increasing smokers’ motivation to respond to a placebo cigarette may lead to greater cravings to smoke a placebo cigarette than Low Motivation group. Between Time Spent Smoking, High Motivation group reported greater Cigarette Butt Weight than Low Motivation group.

High Motivation group reported greater reduction in Urge to Smoke, Total Withdrawal, and Urge to Smoke than Low Motivation group. In total, High Motivation group reported higher subjective ratings than Low Motivation group.

Motivation was induced via scripts that described positive inductions of high motivation to respond to a placebo cigarette. Between Time Spent Smoking, Low Motivation group reported greater cravings to smoke a placebo cigarette than High Motivation group. Increasing smokers’ motivation to respond to a placebo cigarette may lead to greater cravings to smoke a placebo cigarette than Low Motivation group.

High Motivation group reported greater reduction in Urge to Smoke, Total Withdrawal, and Urge to Smoke than Low Motivation group. In total, High Motivation group reported higher subjective ratings than Low Motivation group.

**CONCLUSIONS**

- High and low levels of motivation to respond to a placebo cigarette can be induced in smokers, even when they know they are smoking a placebo cigarette.
- Increasing smokers’ motivation to respond to a placebo cigarette may lead to greater reduction in a) urge to smoke, b) withdrawal, and c) craving.
- Increasing smokers’ motivation to smoke a placebo cigarette may lead to greater Psychological Reward.
- Future research should explore the role motivation can play in smoking cessation, and how motivation level interacts with nicotine content, nicotine instructions, and level of nicotine dependency.

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**BACKGROUND**

- In addition to expectancy and conditioning, motivation has been proposed as a mechanism underlying placebo effects.
- However, the role of motivation in placebo responding has not been adequately tested.
- Induction of high and low motivation to respond to a placebo cigarette in smokers has not been demonstrated. Little is known about the effects of open label placebos.

**METHODS**

**PARTICIPANTS**

- 80 daily cigarette smokers (67.5% Male)
- Mean age=34.78 yrs (SD=14.82)
- Mean CPD=11.66 (SD=7.17)
- Mean years smoked daily=13.34 (SD=11.76)
- 56% White, 38% African American

**RESULTS**

**DESIGN**

- Between-subjects
- Random assignment to 2 conditions (Low vs. High Motivation)
- Motivation was manipulated via scripts that described positive (high motivation) or negative features (low motivation) of individuals who “typically” respond to placebo cigarettes (see Jensen & Kaney, 1991).
- 1 laboratory session, 1 hour long
- All participants smoked Quest brand denicotinized (DN) cigarettes (.05 mg nicotine, 10 mg tar)
- All participants were told the cigarette was a placebo and contained no nicotine (open label)

**RESEARCH QUESTIONS**

- Can high and low levels of motivation to respond to a placebo cigarette be induced in smokers?
- Does level of motivation to smoke a placebo cigarette affect subjective and behavioral responses?