SUPPRESSION OF CRAVING AND MOTIVATION TO SMOKE

Supplemental Online Material

1. Ceiling effects are common in samples of nicotine-deprived heavy smokers [they enter the lab with a high craving score and then may be unable to adequately represent their increased urge during smoking cue exposure (see Sayette et al., 2000)]. Accordingly, in addition to recording a "raw" craving score from 0-100, participants also completed a magnitude estimation of their urge to smoke following cue exposure. Specifically, they compared their post-cue exposure urge to their baseline urge, which was standardized to be a 10. If their craving had doubled from baseline to post cue exposure, for example, they would report a magnitude estimation score of 20, if it had tripled it would be 30. Conversely, if the urge had diminished to half of its initial level the magnitude estimation would be 5. While magnitude estimation serves the purpose of assessing urge without a scale endpoint, it fails to account for initial differences prior to cue exposure (Sayette et al., 2000). In order to assess accumulated urge in participants who entered the lab with high baseline urge in a useful way, a composite urge score combined the raw urge scale score with the magnitude estimation score. That is, if a person initially rated their urge at 50 (on the 0-100 scale) and then during cue exposure indicated that their urge had tripled then their composite score would be 150.

2. Specifically, we used a series of regression equations to predict whether each of these variables predicted behavioral choice task valuation. The only variables significantly associated with smoking valuation were cigarettes smoked per day ($R^2 = .125$, p = .004) and nicotine dependence ($R^2 = .064$, p = .040). Importantly, when these two variables were entered into the model, the link between suppression and behavioral

choice remained significant ($\beta = .27$, $p < .02$). Furthermore, suppression AUs were not correlated with either cigarettes per day ($r = -.129$, $p = .301$) or dependence ($r = .068$, $p = .586$).