

**SUPPLEMENTARY MATERIAL FOR THE ARTICLE “DEVELOPMENTAL  
TRAJECTORIES OF CRITERIA OF NICOTINE DEPENDENCE IN  
ADOLESCENCE” PUBLISHED IN *DRUG AND ALCOHOL DEPENDENCE***

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Coding for all items is 1=yes; 2=no. In some questions, 3=does not apply, was allowed. Specific tobacco product used in the last 12 months, as reported by respondent earlier in the interview, were plugged into the question.

The next questions are about some problems or experiences you may have had over the last 12 months because of [SMOKING TOBACCO PRODUCTS/SMOKING TOBACCO PRODUCTS OR CHEWING SMOKELESS TOBACCO/CHEWING SMOKELESS TOBACCO].

- A. Over time, did you find that you could [SMOKE/SMOKE OR CHEW/CHEW] more without feeling nauseated or dizzy? (Tolerance)
- B. Compared to when you first started [SMOKING/SMOKING OR CHEWING/CHEWING], did you need to [SMOKE/SMOKE OR CHEW/CHEW] more in order to feel satisfied or get the same effect? (Tolerance)
- C. Did you ever have times when you stopped, cut down, or went without [SMOKING/SMOKING OR CHEWING/CHEWING] for a period of time and then experienced the following: a. A strong need or urge to [SMOKE/SMOKE OR CHEW/CHEW]; b. Felt irritable; c. Difficulty concentrating; d. Felt sad, blue or depressed; e. Felt frustrated or angry; f. Muscle aches\*; g. Felt restlessness or impatient; h. Increased appetite or weight gain; i. Increased heart rate\*; j. Nausea or vomiting\*; k. Felt tense or anxious; l. Didn't sleep well. [As per DSM-IV, item a was not used in the definition of withdrawal.] \* Sham items.
- D. Did you ever have times when you [SMOKED/SMOKED OR CHEWED/CHEWED] to keep from feeling bad? (Withdrawal)
- E. Did you ever have times when you [SMOKED/SMOKED OR CHEWED/CHEWED], even though you promised yourself you wouldn't? (Impaired control)
- F. Were there ever times when you [SMOKED/SMOKED OR CHEWED/CHEWED] more frequently or for more days in a row than you intended? (Impaired control)
- G. Were there times when you tried to stop or cut down on your [SMOKING/SMOKING OR CHEWING/CHEWING] and found that you were not able to do so? (Unsuccessful attempts to quit)
- H. Did you ever have periods of several days or more when you [CHAIN-SMOKED, THAT IS, STARTED ANOTHER [DISPLAY PRODUCTS SMOKED]/CHAIN-SMOKED, THAT IS, STARTED ANOTHER [DISPLAY PRODUCTS SMOKED], OR STARTED ANOTHER CHEW/STARTED ANOTHER CHEW] as soon as you had finished one? (Great deal of time spent using)

- I. Did you ever have a period of a month or longer when you gave up or greatly reduced important activities—like sports, school, work, or spending time with friends and family so you could [SMOKE/SMOKE OR CHEW/CHEW]? (Neglect activities)
- J. Did your tobacco use ever cause you any physical problems like coughing, difficulty breathing, lung trouble or problems with your heart or blood pressure? (Use despite negative consequences) - (Screen item for J.a)
- J.a Did you continue to [SMOKE/SMOKE OR CHEW/CHEW] even though you knew that [SMOKING/SMOKING OR CHEWING/CHEWING] was causing you physical problems or making them worse? (Use despite negative consequences)
- K. Did your tobacco use ever cause you any emotional problems like irritability, nervousness, restlessness, difficulty concentrating, or depression? (Use despite negative consequences) - (Screen item for K.a)
- K.a Did you continue to [SMOKE/SMOKE OR CHEW/CHEW] even though you knew that [SMOKING/SMOKING OR CHEWING/CHEWING] was causing you emotional problems or making them worse? (Use despite negative consequences)

## Reference

Dierker, L. C., Donny, E., Tiffany, S., Colby, S. M., Perrine, N., Clayton, R. R., 2007.

The association between cigarette smoking and DSM-IV nicotine dependence among first year college students. *Drug Alcohol Depend.* 86, 106-114.