



Applying the Theory of Planned Behavior to Explore How Smoke-free Air Laws Influence Quitting Intentions

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BACKGROUND & OBJECTIVE

As smoke-free air policies become more common throughout the world, there is a growing body of evidence that these policies motivate smokers to smoke less or quit. Less is known, however, about the mechanisms by which these regulations may change smoking behavior. One possibility is that policy-specific factors (e.g., exposure to a policy and agreement with the policy) lead to changes in psychosocial mediators (e.g., attitudes and beliefs) that subsequently result in changes in smoking behavior. The objective of the current study was to test whether exposure to a smoke-free air law, extent of agreement with regulating smoking in public places, and nicotine dependence influenced intention to take measures to quit smoking directly or indirectly through differences in attitudes, perceptions of norms, or perceptions of control.

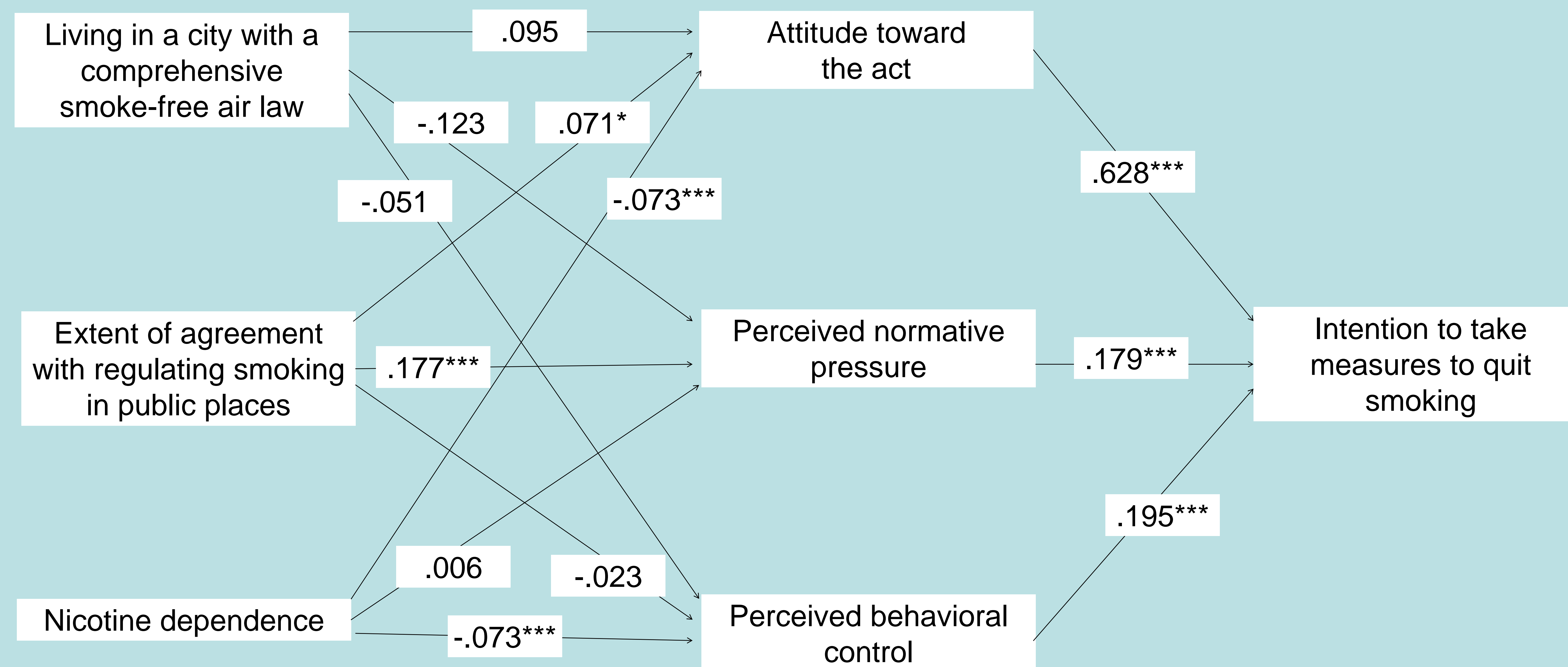
METHODS

Study participants were 395 adults who reported current cigarette smoking and lived in one of seven Texas cities, three with a comprehensive smoke-free air law and four without a law. Data were collected in September and October of 2007 by computer assisted telephone interviews. In addition to smoking behavior, participants reported demographic information, attitudes and perceptions of smoking and smoke-free air laws, and attitudes and beliefs about taking measures to quit smoking within the next month. Several 5-point Likert-style items were averaged to create measures of intention to take measures to quit smoking, attitude toward the act of taking measures to quit smoking, perceived normative pressure to take measures to quit smoking, and perceived behavioral control over taking measures to quit smoking. We used structural equation modeling to conduct our Theory of Planned Behavior (TPB) analysis.

RESULTS

Figure 1 shows coefficients for the effects estimated in our model. Consistent with the TPB, attitudes, perceived normative pressure, and perceived behavioral control were all significantly associated with intention to take measures to quit smoking. Agreement with regulating smoking in public places was significantly associated with attitude and perceived normative pressure about quitting. Nicotine dependence was significantly associated with attitude and perceived behavioral control. There was also a direct effect of nicotine dependence on intention to take measures to quit smoking ($\beta = -.044$, $p = .002$; relation not shown in figure).

Figure 1 – Results with background variables as precursors to Theory of Planned Behavior analysis among adult smokers in Texas, 2007



* $p < .05$, *** $p < .001$

CONCLUSIONS AND IMPLICATIONS

Smoke-free air laws appear to influence quitting intentions through the formation of positive attitudes about regulating smoking in public places and the perception of normative pressure to take measures to quit. Building grassroots support for a smoke-free air law among smokers may be an effective strategy for eventually motivating smokers to consider cessation. In addition, mass media messages that help smokers recognize the normative pressure to quit may be particularly effective in moving smokers toward cessation.

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