

turning knowledge into practice

Economic dependence on tobacco and changes in attitudes
toward tobacco control among North Carolina tobacco
growers

Presented by

*Erik Crankshaw¹; Robert Beach¹; W. David Austin¹; David
Weitzenkamp¹; David Altman²; Alison Snow Jones³.*

¹RTI International; ²Center for Creative Leadership; ³Wake Forest University School of Medicine.

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3040 Cornwallis Road
Phone 919-316-3809

■ P.O. Box 12194 ■
Fax 919-990-8454

Research Triangle Park, NC 27709
e-mail ecrankshaw@rti.org

“It is difficult to get a man to understand something when his salary depends upon his not understanding it”
(Upton Sinclair, 1935)

■ Study Rationale

- History of partnership between Tobacco Industry and tobacco growers in opposing tobacco control efforts
 - Evidence that economic dependence influences attitudes
- Hypothesis: As growers become less dependent on tobacco, they will become less resistant to tobacco control efforts

Are attitudes towards tobacco control and public health changing among North Carolina tobacco growers?

- Data from 5 waves of North Carolina Tobacco Farmer Survey
- Sample restricted to white, male growers
- N = 1,084 at baseline (1997)
- Growth model analysis of perceived risk from tobacco control efforts
- Acres of tobacco grown included as a covariate

Are attitudes towards tobacco control and public health changing among North Carolina tobacco growers?

- There were slight but statistically significant decreases for perceived risk from:
 - Higher cigarette taxes
 - Public smoking restrictions
 - Regulation of tobacco by FDA
- Perceived risk appeared to peak in 1999 (wave 2)
- Total # of tobacco acres grown not significant

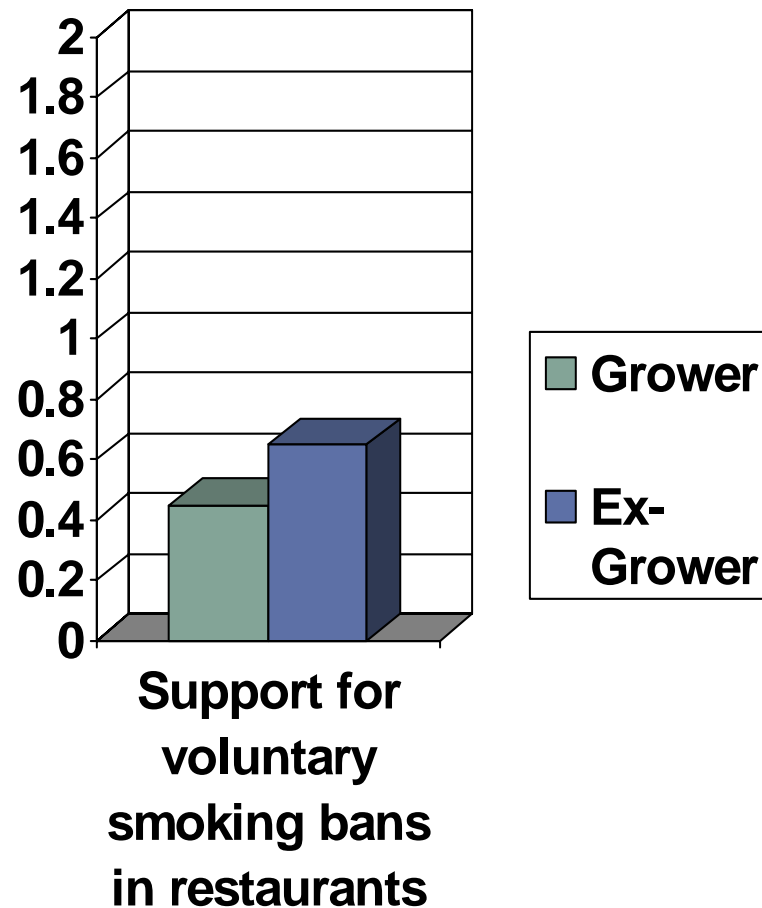
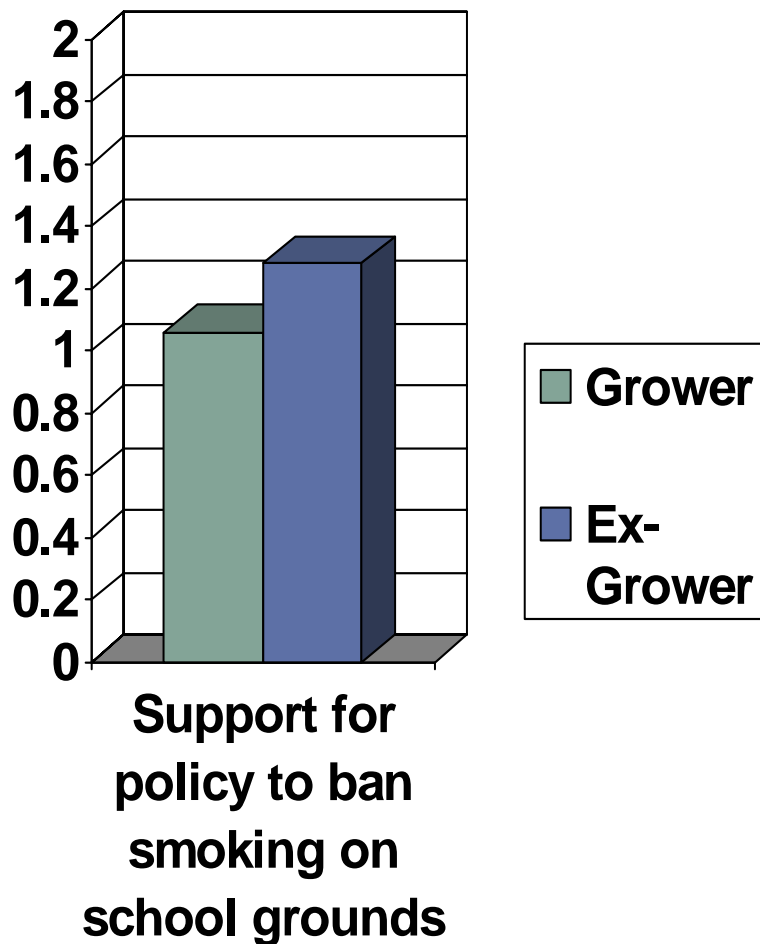
Are ex-tobacco growers more or less likely to oppose tobacco control efforts?

- No baseline (1997) difference in perceived risk from:
 - ◆ Higher cigarette taxes
 - ◆ Regulation of tobacco by the FDA
- 2006 ex-growers have significantly lower baseline perceived risk from:
 - ◆ Restrictions on smoking in public places in the US ($p < 0.01$)

Do ex-growers differ from growers in their attitudes towards tobacco control?

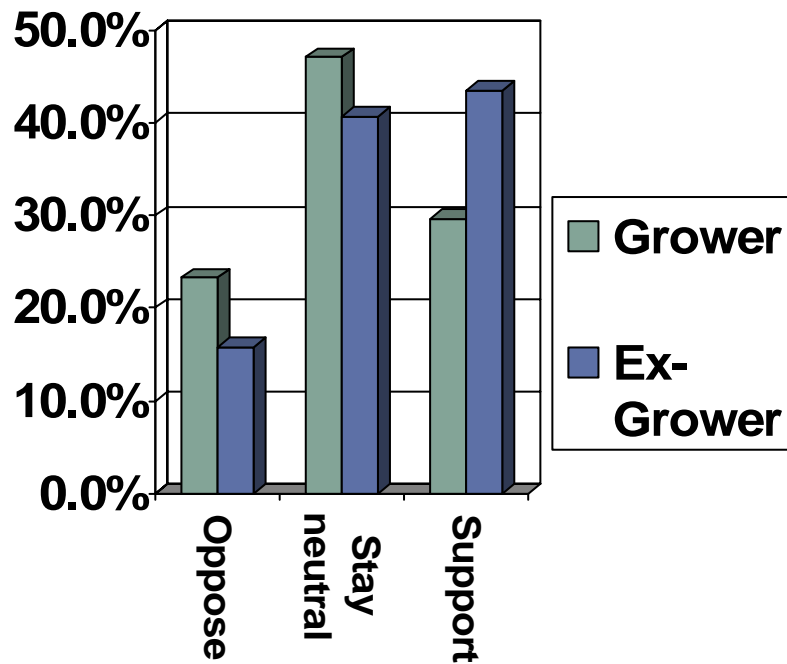
- In 2004, ex-growers significantly more likely to support:
 - A school policy banning smoking ($p < 0.02$)
 - But less likely to support FDA regulation of tobacco products ($p < 0.01$)
- In 2006, ex-growers significantly more likely to support:
 - A school policy banning smoking ($p < 0.02$)
 - A voluntary ban on smoking in restaurants ($p < 0.005$)

Differences in support for tobacco control policy by growing status, 2006

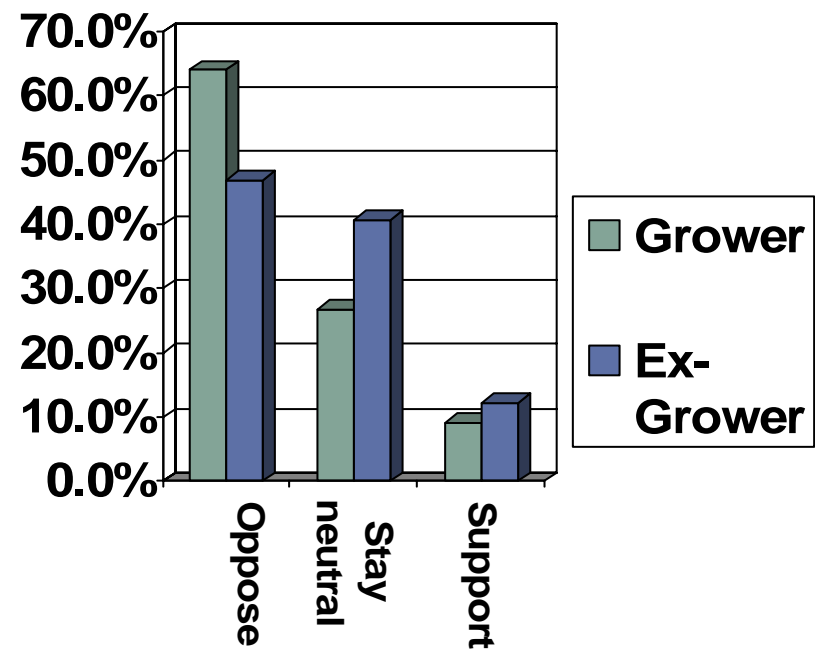


Differences in support for tobacco control policy (cont.)

Support for a school ban



Support voluntary restaurant ban



Does current level of economic dependence on tobacco predict attitudes towards tobacco control among tobacco growers?

- Generalized ordered-logit models
- Predictors and covariates include:
 - **% of total income from tobacco**
 - Age
 - Have children?
 - Level of education
 - Tobacco use
 - Political orientation (liberal – conservative)
 - Treatment county
 - Baseline attitudes*

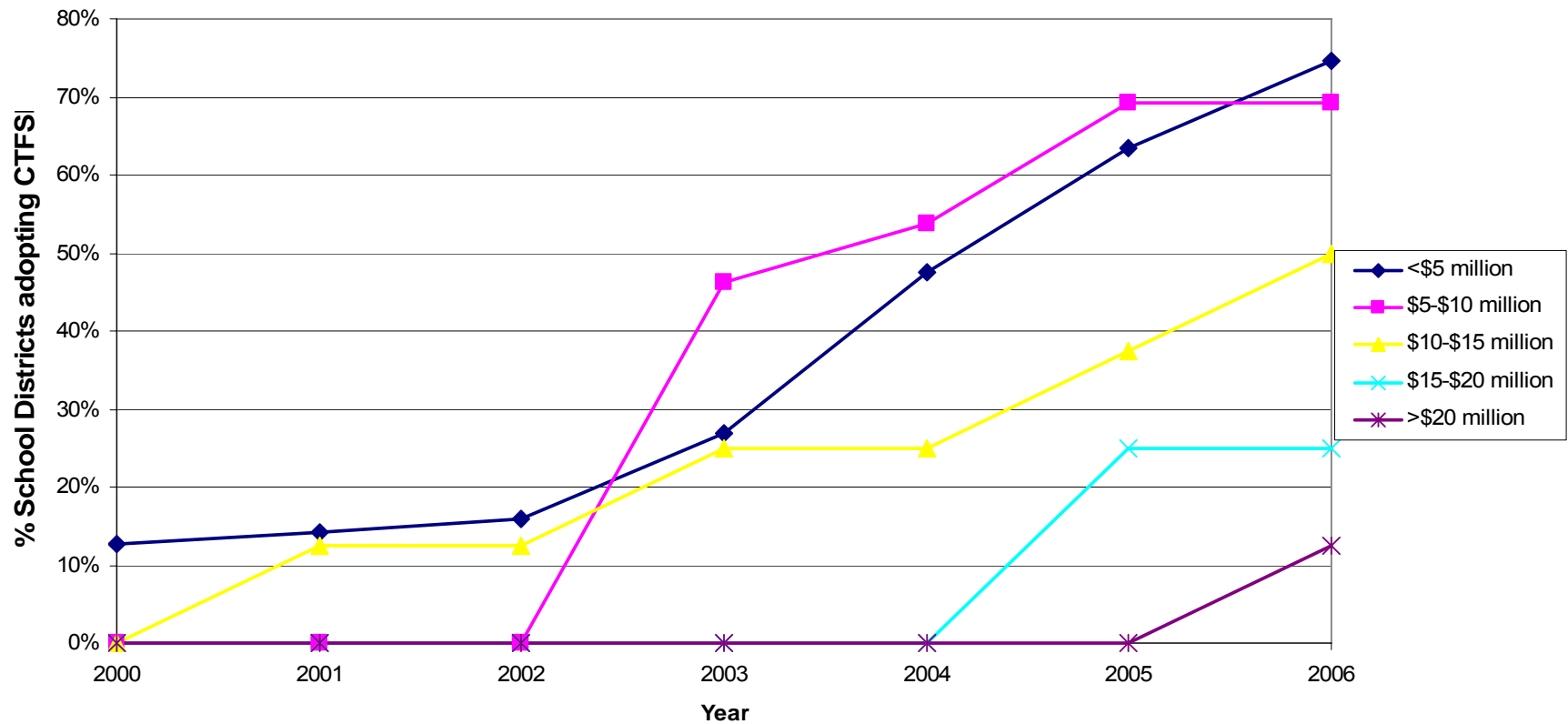
Does current level of economic dependence on tobacco predict attitudes towards tobacco control among tobacco growers?

- In 2004, as % of income from tobacco increased, support for a voluntary ban on smoking in restaurants decreased ($p < 0.03$) among tobacco growers
 - But increase in % income from tobacco was associated with an increase in support for law enforcement fines of businesses that sell to minors
- % income from tobacco was not associated with any of the attitudes in 2006

Additional Analyses

- Does county-level economic dependence on tobacco influence support for tobacco control policy?
 - Examined the relationship between 2003 county-level tobacco revenue and year of Comprehensive Tobacco Free School Policy (CTFSP) adoption

Relationship between NC county tobacco revenues and year of adoption of CTFSP



Relationship between county-level tobacco revenues and CTFSP adoption

- As of June 2006, 75 out of 115 (65%) NC school districts had adopted a CTFSP
- Only 4 of 18 counties (22%) with highest tobacco receipts had adopted a CTFSP
- Each million dollar increment in tobacco revenue is associated with a 10% decline in the likelihood of adoption
- School districts located in counties classified as low tobacco dependent were nearly twice as likely to adopt as were districts located in moderately or highly tobacco-dependent counties

Conclusions

- Since 1997, there has been a slight but significant decrease in perceived risk from tobacco control among tobacco growers
- Evidence that transitioning from tobacco grower to ex-tobacco grower can influence attitudes toward tobacco control
- Limited evidence that among tobacco growers, % income from tobacco (economic dependence) may predict attitudes about tobacco control
- County-level dependence on tobacco appears to have a strong effect on tobacco control policy implementation