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Assessment of Public Acceptance of a Multi-unit Housing, Smoke-free Policy in Broward County, FL

Jamala Patterson, Dr. Michael Hall

Exercise Science & Health Promotion; Florida Atlantic University

The impact of smoking cessation education programs has allowed for insight on the health implications of exposure to secondhand smoke (SHS). SHS is the combination of smoke from the burning end of a cigarette and the smoke exhaled. The increase in awareness amongst the population can be credited to a collection of government agencies and their research. However, the implementations of smoke-free zones are seldom enforced and lead to exposure concerns. This study defends the growing demand to cease involuntary exposure to tobacco smoke within residences. In townhomes and apartments multiple units in one building allow for smoke to pass through connecting ventilation systems. Despite, the toxic repercussions of SHS, multi-family smoke free polices are at the discretion of the property manager. Utilizing survey instruments previously conducted on smoke-free housing initiatives, The American Lung Association produced a fifteen question survey to ensure the representativeness of Broward county Tenants and condominium owners. The questionnaire measures opinions about smoke-free multi-unit communities. Surveys were accessed through the SurveyMonkey website and the paper format was disbursed at 8 tri-rail stations and 3 major bus stations in Broward County, FL. The data were analyzed using Statistical Package for the Social Sciences version 20 to determine frequencies, correlations and regressions. Additional analysis will determine if associations exist between age, type of home, education, income level and willingness to support a multi-unit, smoke free policy. The intention of the analysis is to help focus resources to advocate for the adoption of a multi-unit smoke free policy.

Assessment of Public Acceptance of a Multi-unit Housing, Smoke-free Policy in Broward County, FL



Jamala Patterson, BA
 Department of Exercise Science and Health Promotion, Florida Atlantic University
 777 Glades Rd. Boca Raton FL, 33431

Introduction

The impact of smoking cessation education programs has allowed for insight on the health implications of exposure to secondhand smoke (SHS). SHS is the combination of smoke from the burning end of a cigarette and the smoke exhaled. The increase in awareness amongst the population can be credited to a collection of government agencies and their research. However, the implementations of smoke-free zones are seldom enforced and lead to exposure concerns. This study defends the growing demand to cease involuntary exposure to tobacco smoke within residences. Currently, the smoke free building policies/initiatives are sparse and vary by state. In townhomes and apartments, multiple units in one building allow for smoke to pass through connecting ventilation systems and inhaled. Modifications of air leakage and reduction of transfer by ventilation would only reduce exposure. Despite the toxic repercussions of SHS, multi-family smoke free policies are at the discretion of the property manager.

Methods

Utilizing survey instruments previously conducted on smoke-free housing initiatives, The American Lung Association produced a fifteen question survey with hidden identifiers to ensure the representativeness of Broward county Tenants and condominium owners. The questionnaire measures opinions about smoke-free multi-unit communities. Face validity was assessed by Transforming Our Communities Health (TOUCH) and Broward County Tobacco Free Partnership (TFP). Electronic format copies were accessed through the SurveyMonkey website and the paper format was disbursed at 8 tri-rail stations and 3 major bus stations in Broward County, FL. The data were analyzed between age, type of home, education, income level, allowance in of smoking in home, degree to which you are bothered to tobacco smoke, and willingness to pay more with acceptability of a multiunit smoke free policy. Chi- square testing lists for independence was used to detect significant associations. Further analysis vary logistic regression on demographic variables to predict the likelihood of smoke free policy acceptance.

Results

Demographics: The demographic analyzed included Smoker status: non-smoker (72.4%) and smoker 27.6%. Type of housing: multi-family units (53.9%) and free standing (36%). Gender: female (68.3%) and male (46.9%), and Age:18-25 (27.6%), 26-35 (20.7%), 36-45 (16.1%), 46-55 (17.1%), 56 or older (12.7%), and under 18 (2.0%).

	Approve	Disapprove	ϕ	X ²	P
Smoker	75 58.60%	53 41.40%	0.371	64.63	<.001
Non-Smoker	324 90.80%	33 9.20%	-		
Would allow smoking inside of home	41 63.10%	24 36.90%	0.198	17.46	<.001
Would not allow smoking in home	358 85.20%	62 14.80%			
Not bothered by smoke	28 50.90%	27 49.10%	0.315	39.834	<.001
Bothered by smoke	323 86.80%	49 13.20%			
Not willing to pay more to live in a place that was smoke-free	160 68.70%	73 31.30%	0.342	55.065	<.001
Willing to pay more to live in a place that was smoke-free	239 94.80%	13 5.20%			

Table 1. Chi-Square:

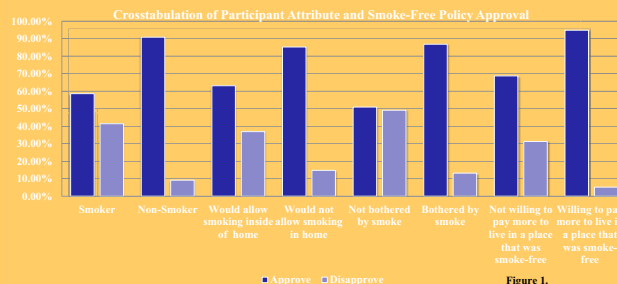
- Smoking status, X² (1, N= 485) =64.63, p<.001, phi =0.371 Analysis detected a significant association with policy approval.
- Allowance of smoking in home, X² (1, N= 485) =17.46, p<.001, phi =0.198 Analysis detected a significant association with policy approval.
- Bothered by smoke, X² (1, N= 427) =39.834, p<.001, phi =0.315 Analysis detected a significant association with policy approval.
- Willing to pay more, X² (1, N= 485) =17.46, p<.001, phi =0.342 Analysis detected a significant association with policy approval.

Table 2. Summary of Logistic Regression Analysis Predicting Smoke-Free Approval

Variables	β	SE	Odds Ratio	Wald Statistic
Income	0.194	0.063	1.215	9.503**
Education	0.194	0.077	1.215	6.389*
Currently Renting	-0.786	0.258	0.456	9.273**
Smoker	-1.937	0.256	0.144	57.205**
Allow smoking in home	-1.218	0.292	0.296	17.454**
Bothered by smoke	1.849	0.31	6.356	35.536**
P-value				
**<.01, *<.05				

Table 2. Logistic Regression Analysis:

The analysis detected that the strongest predictor for policy approval or disapproval was bothered by smoke with an odds ratio (OR) of 6.356, income, (OR) 1.215; education, (OR) 1.215; Currently renting (OR) .456; Allowing smoking in home (OR) .296; Smoker (OR) .144



Discussions

The intention of the analysis is to help focus resources to advocate for the adoption of a multi-unit smoke free policy. The data from the analysis was interesting in that majority of those surveyed were willing to pay more to live in a multi-family unit that was smoke free. As well as nearly half the participants were bothered by smoke. We can conclude from this, that individuals are aware of the negatives effects of second hand smoke and willing to avoid the behavior.

Among groups where we expected to see overwhelming disapproval was evidence that these groups were actually in support of smoke free policies. Of particular interest, a greater proportion of self-identified smokers approved of smoke free policies than disapproved (Figure 1). The community benefits of smoke free policies in multi-unit housing are not lost among smokers. Though individual rights were held in regard among smokers, emphasis on protection of other tenants' rights were fundamental in gaining smoker acceptance.

Previous studies found similar results to the findings. G.Tong, et.al (2006) showed that once implementation of a smoke free program support for smoke free policies increased amongst smokers. Linda Drach, et. al (2010) found that implementation of programs which utilized messages targeting smoker values were effective in increasing smoker support of multi-unit housing smoke free policies. Both studies offer viable solutions to increase smoker acceptance of smoke free policies.

Conclusion:

In summary, identifying target populations that were significantly associated with multi-unit housing smoke free policies allows for a tailored messaging approach to increase policy acceptance. Even among groups with opposition to smoke free policy there is opportunity for change in attitudes through health promotion programs.

Resources

*Drach, L. L., Pizicani, B. A., Rohde, K. L., & Schubert, S. (2010). Peer Reviewed: The Acceptability of Comprehensive Smoke-Free Policies to Low-Income Tenants in Subsidized Housing. *Preventing chronic disease, 7*(3).

*Fong, G. T., Hyland, A., Borland, R., Hammond, D., Hastings, G., McNeill, A., & Driezen, P. (2006). Reductions in tobacco smoke pollution and increases in support for smoke-free public places following the implementation of comprehensive smoke-free workplace legislation in the Republic of Ireland: findings from the ITC Ireland/UK Survey. *Tobacco control, 15*(suppl 3), iii51-iii58.

* U.S. Department of Health and Human Services. Secondhand Smoke. Retrieved from <http://www.nlm.nih.gov/medlineplus/Secondhandsmoke.html>