

Testing the impact of local alcohol licensing policies on reported crime rates in England

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Online Supplementary Material

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Table. Growth models. 2009-2014 *a priori* selected outcomes related to “alcohol crime environments”.

Parameter	shoplifting (SE)		Possession of a weapon (SE)		Drug offenses (SE)		Domestic burglary (SE)	
	Linear trend	Quadratic trend	Linear trend	Quadratic trend	Quadratic trend	Quadratic trend	Linear trend	Quadratic trend
Baseline (year 2009)	-0.786 (0.162) P<0.001		-0.401 (0.152) P<0.001		0.556 (0.157) P<0.001		0.982 (0.164) P<0.001	
Trend (2009-2014)	-0.142 (0.027) P<0.001	0.008 (0.002) P<0.001	-0.526 (0.045) P<0.001	0.042 (0.004) P<0.001	-0.044 (0.035) P=0.246	0.008 (0.003) P=0.010	0.002 (0.034) P=0.872	-0.009 (0.003) P=0.002
Effect on intercept								
No policy	ref		ref		ref		ref	
Low policy	-0.073 (0.109)		-0.171 (0.103)		-0.165 (0.106)		-0.245 (0.111)	
Medium	0.148 (0.088)		0.025 (0.083)		0.020 (0.085)		0.115 (0.090)	
High policy	0.375 (0.117) P=0.004		0.570 (0.110) P<0.001		0.528 (0.113) P<0.001		0.434 (0.119) P<0.001	
Deprivation at baseline	3.278 (0.638) P<0.001		5.832 (0.599) P<0.001		5.739 (0.616) P<0.001		-4.961 (0.646) P<0.001	
Population at baseline	-0.20 (0.038) P<0.001		-0.298 (0.036) P<0.001		-0.171 (0.037) P<0.001		-0.175 (0.038) P<0.001	
Outlet density at baseline	0.002 (0.002) P=0.285		0.001 (0.001) P=0.715		0.010 (0.002) P<0.001		0.000 (0.002) P=0.799	
Alcohol-related hospital admissions at baseline	-0.000 (0.001) P=0.895		-0.004 (0.001) P=0.001		-0.006 (0.001) P<0.001		-0.002 (0.001) P=0.119	
Effects on slope								
No policy	ref	ref	ref	ref	ref	ref	ref	ref
Low policy	0.062 (0.018)	-0.006 (0.002)	0.104 (0.030)	-0.105 (0.003)	0.087 (0.023)	-0.008 (0.002)	0.095 (0.023)	-0.008 (0.002)
Medium	-0.011 (0.015)	0.001 (0.001)	0.027 (0.024)	-0.003 (0.002)	0.019 (0.019)	-0.002 (0.002)	0.003 (0.019)	-0.000 (0.002)
High policy	-0.079 (0.020) P<0.001	0.007 (0.002) P<0.001	-0.166 (0.032) P<0.001	0.014 (0.003) P<0.001	-0.094 (0.025) P<0.001	0.008 (0.002) P<0.001	-0.083 (0.025) P<0.001	0.007 (0.002) P<0.001
Deprivation	-0.700 (0.106) P<0.001	0.069 (0.009) P<0.001	-0.773 (0.175) P<0.001	0.080 (0.017) P<0.001	-1.066 (0.136) P<0.001	0.092 (0.012) P<0.001	-0.682 (0.135) P<0.001	0.054 (0.012) P<0.001
Population at baseline	0.071 (0.006) P<0.001	-0.006 (0.001) P<0.001	0.112 (0.010) P<0.001	-0.011 (0.001) P<0.001	0.076 (0.008) P<0.001	-0.008 (0.001) P<0.001	0.118 (0.008) P<0.001	-0.012 (0.001) P<0.001
Outlet density at baseline	0.001 (0.000) P<0.001	-0.000 (0.000) P<0.001	0.001 (0.000) P=0.003	-0.000 (0.000) P=0.003	-0.001 (0.000) P=0.002	0.000 (0.000) P=0.042	0.001 (0.000) P=0.002	-0.000 (0.000) P=0.002
Alcohol-related hospital admissions at baseline	0.000 (0.000) P=0.049	-0.000 (0.000) P=0.797	0.001 (0.000) P<0.001	-0.000 (0.000) P<0.001	0.002 (0.000) P<0.001	-0.000 (0.000) P<0.001	-0.001 (0.000) P<0.001	0.000 (0.000) P<0.001

Variance estimates	estimates	estimates	estimates	estimates
Intercept	0.317	0.194	0.271	0.305
Slope	0.002	0.003	0.004	0.004
covariance	-0.63	-0.63	-0.75	-0.66
Residual	0.013	0.041	0.021	0.021
BIC	-7,264	-127	-4,272	-4,274
Explained variance	95.9%	89.0%	93.6%	94.5%