Published in final edited form as:

Sex Transm Dis. 2015 October ; 42(10): 580–584. doi:10.1097/OLQ.0000000000000347.

Use of Expedited Partner Therapy for Sexually Transmitted Diseases in College and University Health Centers in the United States, 2011–2012

Ryan Cramer, JD, MPH*, Nina Martinez*, Craig Roberts, PA-C, MS†, Melissa A. Habel, MPH*, E. Victor Leino, MA, PhD‡, Jami S. Leichter, PhD*

*Division of STD Prevention, Centers for Disease Control and Prevention, Atlanta, GA

†University of Wisconsin-Madison, Madison, WI

‡American College Health Association, Baltimore, MD

Abstract

We examined expedited partner therapy for chlamydia and gonorrhea in college and university health centers by institutional and policy characteristics. Expedited partner therapy awareness and use was low (44.1% used), did not differ by institutional characteristics, and differed by policy environment. Our findings suggest missed opportunities for sexually transmitted disease prevention in college and university health centers.

The college-aged population (18- to 24-year olds) is within one of the most at-risk age groups for some sexually transmitted diseases (STDs) in the United States; in 2011, 15- to 24-year-olds accounted for 69.4% and 58.8% of all reported cases of chlamydia and gonorrhea, respectively.¹ The prevalence of chlamydia has been estimated to be 2.5% and 2.8% among individuals aged 14 to 19 years and 20 to 25 years, respectively,² and the prevalence of gonorrhea has been estimated to be 0.40% among individuals aged 14 to 25 years.³ The American College Health Association (ACHA) 2012 Pap and STI Survey found that among students attending college and university health centers, the overall positivity rates for chlamydia and gonorrhea were similar to other national prevalence estimates for this age group: 4.9% for chlamydia and 0.6% for gonorrhea.⁴ In addition, one study found that only half (50.3%) of surveyed sexually active college students reported condom use or other protective barrier during vaginal intercourse within the past 30 days “mostly or always.”⁵ College students may also face unique barriers to testing and treatment such as confidentiality if they are insured under their parent’s health insurance plan,⁶ and college men are less likely than women to seek some professional health services.⁷ College and university health centers are in a position to play an important role in STD prevention; an estimated 60% of US colleges and universities have a health center, and 73% of college

Correspondence: Ryan Cramer, JD, MPH, Centers for Disease Control and Prevention, 1600 Clifton Rd, MS E-02, Atlanta, GA 30329-4027. rcramer@cdc.gov.

Conflict of interest: None declared.

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

students attend a school with a health center.⁸ A recent survey found that “nearly all” colleges and universities with health centers had tests for chlamydia, gonorrhea, and HIV available.⁴ Nevertheless, college and university health centers may face barriers in reaching students. One study found that only 35.6% of students at a Midwestern university had been tested for chlamydia and gonorrhea, and 49.3% of participants lacked motivation for STD testing because they “believ[ed] that they were not at risk.”⁹ Another study found similar results among female college students; most did not consider themselves at risk for STDs despite low reported condom use.¹⁰ Therefore, some university and college students may not seek needed STD-related health care.

Partner services are important because they can reach persons who may have an STD and may not otherwise access STD services. One partner services strategy is expedited partner therapy (EPT), the practice of providing a prescription or medication to a patient who has been diagnosed as having an STD to give to his or her sexual partner.¹¹ The Centers for Disease Control and Prevention has issued guidance regarding the use of EPT for preventing recurrent chlamydia and gonorrhea infections in heterosexual men and women,¹² and EPT has been endorsed by various medical and public health organizations.^{11–16}

Although EPT has been evaluated within and across certain clinical settings,^{17–20} it has not been examined in US college and university health centers. Knowledge of what is associated with EPT awareness and use among health care providers with access to an at-risk population with suboptimal health care seeking behaviors may prove useful in decreasing STD burden within this population. This note examines awareness and use of EPT in college and university health centers in the United States by institutional and policy characteristics.

We used the ACHA’s annual Pap and STI Survey of college and university health centers for 2011 and 2012. Surveys were distributed to ACHA members and among listservs commonly used by college and university health centers. One survey per college or university is completed, typically by a health center administrator or medical official. If an institution responded in 2011 and 2012, only 2012 responses were included in this analysis. Institutions were excluded from this analysis if they were not located in the 50 states and the District of Columbia or did not identify as a 4-year institution because health centers are generally found at 4-year institutions (only 3 respondents in this sample identified as a 2-year institution).

We examined several institutional variables from the ACHA survey, including EPT use. Participants were asked “Which of the following statements best describes your health service’s use of EPT?” Potential responses concerned EPT’s permissibility, knowledge of its legal status, and its use. We recoded the responses to focus only on provider use or nonuse of EPT: 1 = EPT is used (legal in our state and used by our providers), 2 = EPT is not used (legal in our state but not used, not legal in our state or otherwise prohibited by rule or policy), or 3 = don’t know the status of EPT use. We did not limit clinic use by condition (i.e., chlamydia or gonorrhea).

We also included 3 variables that measure the policy environment for EPT: EPT state laws, state medical and nonmedical board EPT policy statements, and a probable state legal status

of EPT. Expedited partner therapy laws consisted of binding legal authority that authorized EPT (e.g., statutes and regulations) for any condition and were collected using Westlaw legal research database (Thompson Reuters, New York, NY). The probable state EPT legal status is based on an analysis performed by Hodge and colleagues²¹ where EPT in each state was categorized as permissible, potentially allowable, or prohibited. These results are displayed on a Centers for Disease Control and Prevention Web site and are updated annually.²² We coded these variables to reflect the legal and policy environment for the calendar year before survey administration (2010 or 2011).

For bivariate analyses, χ^2 tests and Fisher exact tests were used to assess awareness of legal status and use of EPT. All variables examined in bivariate analyses were included in adjusted logistic regression models that examined health center EPT use.²³ Policy variables were analyzed in separate models to reduce multicollinearity.²³ All statistical analyses were conducted in SAS version 9.3 (Cary, NC).²⁴

Overall, 236 unique institutions responded to the survey in 2011 or 2012 (Appendix). Most were urban (62.7%), public (67.4%), and billed for sexually transmitted infection services (56.3%). Respondents' health center positions consisted of administrator (24.4%), physician (15.8%), other clinician (50.0%), and other role (9.8%). There were no significant changes in the sample between 2011 and 2012.

EPT was used by 44.1% of health centers, whereas 19.5% of health centers did not know if EPT was used (Table 1). In bivariate analyses, no institutional characteristic were associated with EPT awareness; however, policy variables were significant (Table 1). Expedited partner therapy was used in 57.8% of health centers where laws explicitly authorized it, and 32.3% of health centers without a law used EPT ($P = 0.0007$). Similarly, 54.3% of health centers located in states where the probable legal status of EPT was permissible used EPT, 34.0% where it was potentially allowable and 5.2% where it was considered prohibited ($P < 0.0002$).

Where EPT use was known ($n = 177$), 54.8% of college and university health centers practiced EPT (Table 2). Similar to awareness and use of EPT, EPT use only differed by select policy variables in bivariate analyses. In adjusted analyses, institutional or respondent characteristics were not significant. However, health centers in states with a law authorizing EPT were more likely to use EPT than health centers in states without a law (adjusted odds ratio, 2.5; 95% confidence interval [CI], 1.2–4.9; Table 2). In addition, health centers where EPT is considered permissible were more likely to use EPT than health centers where EPT is considered prohibited (adjusted odds ratio, 7.9; 95% CI, 2.5–24.7).

To our knowledge, this is the first note to examine the use of EPT in college and university health centers. We found that EPT was used in less than half (44.1%) of clinics overall and was not used in 27.5% of health centers in states with EPT laws, highlighting potential missed opportunities for partner treatment through EPT. This low rate of use may be due to a lack of awareness about EPT or its legality. In addition, 19.5% of respondents did not know if their health service used EPT, and 14.7% of health centers in states with a law authorizing EPT did not know whether EPT was used. Although concern for liability has been cited as

barrier to EPT's use, these findings may indicate that additional barriers exist. Future research could specifically explore barriers to EPT practice in college and university health centers, particularly within policy environments that facilitate its use. Our policy-related findings are consistent with prior studies analyzing the association between state policy environments for EPT and higher EPT use and acceptance.^{25–27} One previous study showed that although EPT's perceived illegality is widespread,²⁸ actual legal barriers are much less pervasive.²¹ Expedited partner therapy use did not differ by any of the institutional characteristics that we examined, indicating that the policy environment may be an important factor impacting EPT use in the college health clinic setting.

Inconsistent with previous findings examining the receipt of EPT among patients with gonorrhea,²⁶ EPT use did not differ based on state board policy statements. It is possible that college and university clinicians may be relatively more influenced by internal health center policies than by medical board guidance. Future analyses could examine how board policy statements influence EPT practice across health care settings.

This note has several limitations. Our sample size was relatively small ($n = 236$); although we are unable to calculate the actual response rate given survey methods (e.g., the use of membership lists and listservs), there are approximately 2774 US 4-year colleges.²⁹ We were not able to adjust for clustering by state given the small sample size. In addition, use of EPT in a health center was self-reported by only one member of a health center's staff; it is possible that some responses reflected individual versus clinic-wide practices.

Our findings of low EPT use suggest potential missed opportunities for STD prevention. Further examination into barriers to EPT, particularly within permissive policy environments, may be useful. Inconsistent with a prior study, EPT use did not differ based on the presence of professional board policy statements concerning EPT. Future analyses could investigate the influence of board policy statements concerning EPT across clinical settings.

Appendix: Institutional characteristics by year of ACHA survey

Characteristic (n = 236)	Year of Survey		Total, n (%)	P
	2011 (n = 62), n (%)	2012 (n = 174), n (%)		
Respondent's role in health center (missing = 2)				0.1763
Administrator	19 (30.6)	38 (22.1)	57 (24.4)	
Physician	13 (21.0)	24 (14.0)	37 (15.8)	
Other clinician	24 (38.7)	93 (54.1)	117 (50.0)	
Other role	6 (9.7)	17 (9.9)	23 (9.8)	
Campus setting (missing = 3)				0.0842
Urban	32 (51.6)	114 (66.7)	146 (62.7)	
Suburban	16 (25.8)	26 (15.2)	42 (18.0)	
Rural	14 (22.6)	31 (18.1)	45 (19.3)	
Type of institution (missing = 3)				0.8553
Public 4-y	41 (68.3)	116 (67.1)	157 (67.4)	

Characteristic (n = 236)	Year of Survey		Total, n (%)	P
	2011 (n = 62), n (%)	2012 (n = 174), n (%)		
Private 4-y	19 (31.7)	57 (32.9)	76 (32.6)	0.5821
Undergraduate student enrollment (missing = 1)				
<5000	20 (32.3)	44 (25.4)	64 (27.2)	
5000–19,999	29 (46.8)	88 (50.9)	117 (49.8)	
20,000	13 (21.0)	41 (23.7)	54 (23.0)	0.3040
Graduate and professional student enrollment (missing = 1)				
<5000	45 (73.8)	116 (66.7)	161 (68.5)	
5000	16 (26.2)	58 (33.3)	74 (31.5)	
Minority-serving institution				0.3539
No	55 (88.7)	161 (92.5)	216 (91.5)	
Yes	7 (11.3)	13 (7.5)	20 (8.5)	
Faith-based institution				0.7078
No	53 (85.5)	152 (87.4)	205 (86.9)	
Yes	9 (14.5)	22 (12.6)	31 (13.1)	
Payment for STI screening (missing = 21)				0.0931
Always a cost billed	34 (60.7)	87 (54.7)	121 (56.3)	
Sometimes a cost billed	15 (26.8)	63 (39.6)	78 (36.3)	
All are free	7 (12.5)	9 (5.7)	16 (7.4)	

Percentages reflect column percent per year.

REFERENCES

- Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2012. Atlanta, GA: U.S. Department of Health and Human Services, 2014.
- Datta SD, Torrone E, Kruszon-Moran D, et al. Chlamydia trachomatis trends in the united states among persons 14 to 39 years of age, 1999–2008. *Sex Transm Dis* 2012; 39:92–96.
- Torrone EA, Johnson RE, Tian LH, et al. Prevalence of Neisseria gonorrhoeae among persons 14 to 39 years of age, United States, 1999 to 2008. *Sex Transm Dis* 2013; 40:202–205. [PubMed: 23407466]
- ACHA 2012 Pap and STI Survey for calendar year 2011 data survey data report [American College Health Association Web site]. 4 1, 2013 Available at: http://www.acha.org/topics/docs/ACHA_CY2011_PapTest_and_STI_Survey_FullDataReport.pdf. Accessed May 1, 2015.
- American College Health Association. American College Health Association–National College Health Assessment II: Reference Group Executive Summary Spring 2013. Hanover, MD: American College Health Association, 2013.
- Slive L, Cramer R. Health reform and the preservation of confidential health care for young adults. *J Law Med Ethics* 2012; 40:383–390. [PubMed: 22789053]
- Johnson ME. Influences of gender and sex role orientation on help-seeking attitudes. *J Psychol Interdiscip Appl* 1988; 122:237–241.
- Koumans EH, Sternberg MR, Motamed C, et al. Sexually transmitted disease services at US colleges and universities. *J Am Coll Health* 2005; 53:211–217. [PubMed: 15813231]
- Moore EW. Human immunodeficiency virus and chlamydia/gonorrhea testing among heterosexual college students: Who is getting tested and why do some not? *J Am Coll Health* 2013; 61:196–202. [PubMed: 23663123]

10. Hickey MT, Cleland C. Sexually transmitted infection risk perception among female college students. *J Am Assoc Nurse Pract* 2013; 25: 377–384. [PubMed: 24170621]
11. Centers for Disease Control and Prevention. Expedited Partner Therapy in the Management of Sexually Transmitted Diseases. Atlanta, GA: US Department of Health and Human Services, 2006.
12. Workowski KA, Berman S, Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2010. *MMWR Recomm Rep* 2010; 59:1–110.
13. Expedited partner therapy in the management of gonorrhea and chlamydia by obstetrician-gynecologists [American College of Obstetrics and Gynecologists Web site]. 9 2011 Available at: <http://www.acog.org/~media/Committee%20Opinions/Committee%20on%20Adolescent%20Health%20Care/co506.ashx?dmc=1&ts=20111207T1406092727>. Accessed May 1, 2015.
14. American Bar Association Recommendation 116A [American Bar Association Web site]. 8 12, 2008 Available at: <http://www.abanet.org/leadership/2008/annual/adopted/OneHundredSixteenA.doc>. Accessed May 1, 2015.
15. Burstein GR, Eliscu A, Ford K, et al. Expedited partner therapy for adolescents diagnosed with chlamydia or gonorrhea: A position paper of the Society for Adolescent Medicine. *J Adolesc Health* 2009; 45:303–309. [PubMed: 19699429]
16. Opinion 8.07—Expedited Partner Therapy [American Bar Association Web site]. 2008 Available at: <http://www.ama-assn.org/ama/pub/physician-resources/medical-ethics/code-medical-ethics/opinion807.page?> Accessed May 1, 2015.
17. Taylor MM, Collier MG, Winscott MM, et al. Reticence to prescribe: Utilization of expedited partner therapy among obstetrics providers in Arizona. *Int J STD AIDS* 2011; 22:449–452. [PubMed: 21742811]
18. Jotblad S, Park IU, Bauer HM, et al. Patient-delivered partner therapy for chlamydial infections: Practices, attitudes, and knowledge of California family planning providers. *Sex Transm Dis* 2012; 39: 122–127. [PubMed: 22249301]
19. Packel LJ, Guerry S, Bauer HM, et al. Patient-delivered partner therapy for chlamydial infections: Attitudes and practices of California physicians and nurse practitioners. *Sex Transm Dis* 2006; 33:458–463. [PubMed: 16794548]
20. Mears CJ, Kelly T, Kaviany S, et al. Expedited partner therapy and STI awareness. In: Society of Adolescent Health and Medicine Annual Meeting 2014, Austin (TX), March 23–26, 2014 Oak Lawn: Advocate Children's Hospital, 2014:119–123.
21. Hodge JG, Pulver A, Hogben M, et al. Expedited partner therapy for sexually transmitted diseases: Assessing the legal environment. *Am J Public Health* 2008; 98:238–243. [PubMed: 18172137]
22. Legal Status of Expedited Partner Therapy [Centers for Disease Control and Prevention Web site]. 3 18, 2015 Available at: <http://www.cdc.gov/std/ept/legal/default.htm>. Accessed May 1, 2015.
23. Hosmer DW, Lemeshow S. *Applied Logistic Regression*, 2nd ed. New York: Wiley-Interscience, 2000.
24. SAS 9.3 Software Overview [SAS Institute Inc. Web site]. Available at: <http://support.sas.com/software/93/>. Accessed May 1, 2015.
25. Cramer R, Hogben M, Handsfield HH. A historical note on the association between the legal status of expedited partner therapy and physician practice. *Sex Transm Dis* 2013; 40:349–351. [PubMed: 23588121]
26. Cramer R, Leichter JL, Stenger MR, et al. The legal aspects of expedited partner therapy practice: Do state laws and policies really matter? *Sex Transm Dis* 2013; 40:657–662. [PubMed: 23859917]
27. Mickiewicz T, Al-Tayyib A, Thrun M, et al. Implementation and effectiveness of an expedited partner therapy program in an urban clinic. *Sex Transm Dis* 2012; 39:923–929. [PubMed: 23169171]
28. Golden MR, Anukam U, Williams DH, et al. The legal status of patient-delivered partner therapy for sexually transmitted Infections in the United States. *Sex Transm Dis* 2005; 32:112–114. [PubMed: 15668618]
29. National Center for Education Statistics. *Digest of Education Statistics*, 2011 (NCES 2012–001). Washington: U.S Department of Education, 2012.

Table 1.

Awareness of EPT Use in Health Center by Legal and Policy Variables

Characteristic (n = 236)	EPT Is Used in the Health Center, Frequency (%)			P*
	Yes	No	Don't know	
Overall (missing = 16)	97 (44.1)	80 (36.4)	43 (19.5)	
Respondent's role in health center				0.2050
Administrator	26 (50.0)	13 (25.0)	13 (25.0)	
Physician	14 (40.0)	16 (45.7)	5 (14.3)	
Other clinician	49 (44.6)	44 (40.0)	17 (15.5)	
Other role	8 (38.1)	6 (28.6)	7 (33.3)	
Campus setting				0.8283
Urban	61 (44.9)	50 (36.8)	25 (18.4)	
Suburban	14 (37.8)	16 (43.2)	7 (18.9)	
Rural	21 (46.7)	14 (31.1)	10 (22.2)	
Type of institution (missing = 2)				0.2872
Public 4-y	65 (44.2)	57 (38.8)	25 (17.0)	
Private 4-y	31 (43.7)	22 (31.0)	18 (25.4)	
Undergraduate student enrollment (missing = 1)				0.1524
<5000	22 (36.7)	20 (33.3)	18 (30.0)	
5000–19,999	49 (45.0)	41 (37.6)	19 (17.4)	
20,000	26 (52.0)	18 (36.0)	6 (12.0)	
Graduate and professional student enrollment (missing = 1)				0.1084
<5000	61 (40.7)	54 (36.0)	35 (23.3)	
5000–19,999	35 (50.7)	26 (37.7)	8 (11.6)	
Minority-serving institution				0.3842
No	88 (43.6)	76 (37.6)	33 (17.2)	
Yes	9 (50.0)	4 (22.2)	5 (27.8)	
Faith-based institution				0.0486
No	89 (46.4)	70 (36.5)	33 (17.2)	
Yes	8 (28.6)	10 (35.7)	10 (35.7)	
State law				0.0007

Characteristic (n = 236)	EPT Is Used in the Health Center; Frequency (%)			P*
	Yes	No	Don't know	
Law explicitly authorizes EPT	59 (57.8)	28 (27.5)	15 (14.7)	0.0002
No law explicitly authorizing EPT	38 (32.2)	52 (44.1)	28 (23.7)	
Probable EPT legal status				
Permissible	76 (54.3)	38 (27.1)	26 (18.6)	
Potentially allowable	16 (34.0)	21 (44.7)	10 (21.3)	0.4580*
Prohibited	5 (5.2)	21 (63.6)	7 (21.2)	
Medical board policy statement				
Permits EPT	10 (45.5)	5 (22.7)	7 (31.8)	
No EPT policy statement	81 (43.8)	71 (38.4)	33 (17.8)	0.4580*
Prohibits EPT	6 (46.2)	4 (30.8)	3 (23.1)	
Nonmedical board policy statement				
Permits EPT	4 (36.4)	3 (27.3)	4 (21.1)	
No EPT policy statement	87 (45.8)	68 (35.8)	35 (18.4)	0.6810
Prohibits EPT	6 (31.6)	9 (47.4)	4 (21.1)	
Payment for STI screening (missing = 10)				
Always a cost billed	51 (44.0)	41 (35.3)	24 (20.7)	
Sometimes a cost billed	33 (44.6)	31 (41.9)	10 (13.5)	
All are free	7 (50.0)	4 (28.6)	3 (21.4)	

* Fisher exact test.

Table 2.
EPT Use in Health Center by Institutional Characteristics and Legal and Policy Variables: Bivariate and Adjusted Analyses

Characteristic (n = 117)	Bivariate Analyses			P	EPT Law Adjusted, OR (95% CI)*	EPT Legal Status, Adjusted OR (95% CI)
	Yes, Frequency (%)	No, Frequency (%)	No, Frequency (%)			
Overall	97 (54.8)	80 (45.2)				
Respondent's role in health center (missing = 1)				0.3598		
Administrator	26 (66.7)	13 (33.3)			1.0	1.0
Physician	14 (46.7)	16 (53.5)			0.4 (0.1–1.2)	0.4 (0.1–1.4)
Other clinician	49 (52.7)	44 (47.3)			0.5 (0.2–1.2)	0.5 (0.2–1.2)
Other role	8 (57.1)	6 (42.9)			0.4 (0.1–1.7)	0.4 (0.1–1.6)
Campus setting (missing = 1)				0.5547		
Urban	61 (55.0)	50 (45.1)			1.0	1.0
Suburban	14 (46.7)	16 (53.3)			0.9 (0.4–2.4)	0.9 (0.3–2.4)
Rural	21 (60.0)	14 (40.0)			1.4 (0.5–3.4)	1.2 (0.5–3.0)
Type of institution (missing = 2)				0.5244		
Public 4-y	65 (53.3)	57 (46.7)			1.0	1.0
Private 4-y	31 (58.5)	22 (41.5)			1.7 (0.6–5.1)	1.3 (0.4–4.0)
Undergraduate student enrollment (missing = 1)				0.8088		
<5000	22 (52.4)	20 (47.6)			1.0	1.0
5000–19,999	49 (54.4)	41 (45.6)			1.2 (0.4–3.3)	1.2 (0.4–3.4)
20,000	26 (59.1)	18 (40.1)			1.3 (0.3–5.2)	1.3 (0.3–5.7)
Graduate and professional student enrollment (missing = 1)				0.5827		
<5000	61 (53.0)	54 (47.0)			1.0	1.0
5000–19,999	35 (57.4)	26 (42.6)			1.2 (0.5–2.8)	1.2 (0.5–2.8)
Minority-serving institution				0.2775		
No	88 (53.7)	76 (46.3)			1.0	1.0
Yes	9 (69.2)	4 (30.8)			1.2 (0.3–5.0)	1.1 (0.3–4.3)
Faith-based institution				0.3515		
No	89 (56.0)	70 (44.0)			1.0	1.0
Yes	8 (44.4)	10 (55.6)			0.6 (0.1–2.2)	0.8 (0.2–3.3)
State law				0.0006		—

Characteristic (n = 117)	Bivariate Analyses			EPT Law Adjusted, OR (95% CI) *	EPT Legal Status, Adjusted OR (95% CI)
	Yes, Frequency (%)	No, Frequency (%)	P		
Law authorizing EPT	59 (67.8)	28 (32.2)		2.5 (1.2–4.9)	
No law authorizing EPT	38 (42.2)	52 (57.8)		1.0	
Probable EPT legal status			<0.0001	—	
Permissible	76 (66.7)	38 (33.3)			7.9 (2.5–24.7)
Potentially allowable	16 (43.2)	21 (56.8)			3.3 (0.9–12.2)
Prohibited	5 (19.2)	21 (80.8)			1.0
Payment for STI screening (missing = 10)			0.7315		
Always a cost billed	51 (55.4)	41 (44.6)		0.4 (0.1–2.1)	0.6 (0.1–2.8)
Sometimes a cost billed	33 (51.6)	31 (48.4)		0.4 (0.1–2.0)	0.4 (0.1–2.2)
All are free	7 (63.6)	4 (36.4)		1.0	1.0

* Policy variables were analyzed in separate models to reduce multicollinearity.