Online Appendix
for "College Party Culture and Sexual Assault"
by Jason M. Lindo, Peter Siminski, and Isaac D. Swensen
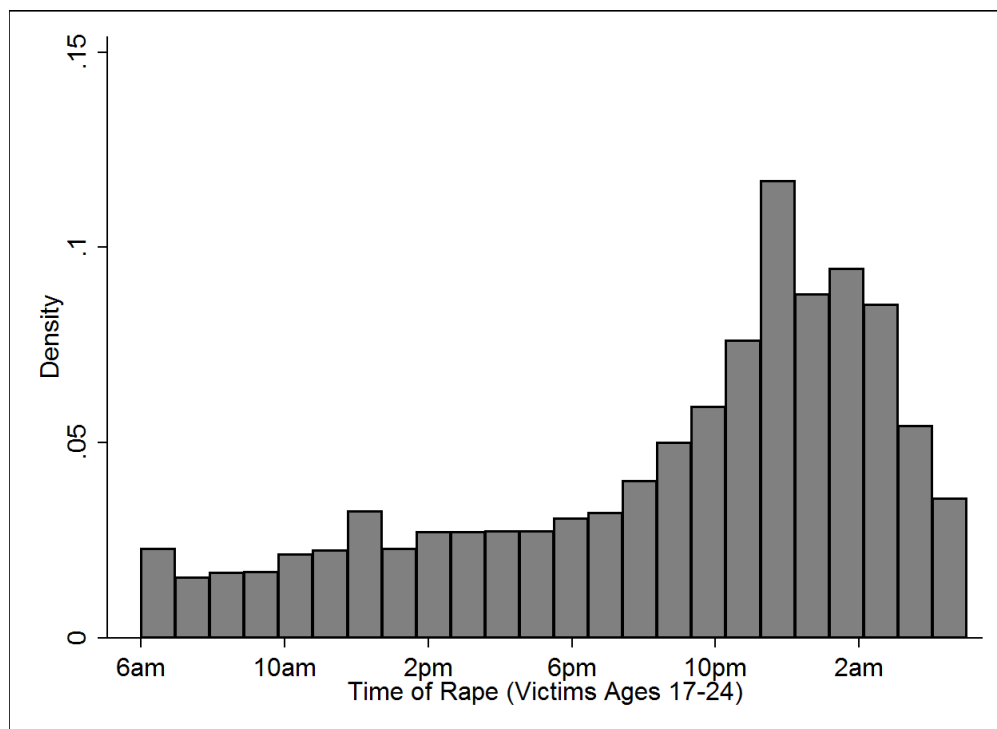

Figure A1: Distribution of Reports of Rape by Time of Incident

Note: This figure shows time-of-day distribution of reports of rapes with 17-24 year old victims reported to agencies which cover college campuses with a Division 1 football team by time of incident.

Panel A
Adjusted for agency fixed effects,
year fixed effects, and holiday fixed effects

Panel B
Adjusted for agency-by-month-of-year fixed effects,
year fixed effects, and holiday fixed effects

Panel C
Adjusted for agency-by-week-of-year fixed effects,
year fixed effects, and holiday fixed effects

Panel D
Adjusted for agency-by-year-by-month fixed effects
and holiday fixed effects

Panel E
Adjusted for agency-by-year-by-week fixed effects
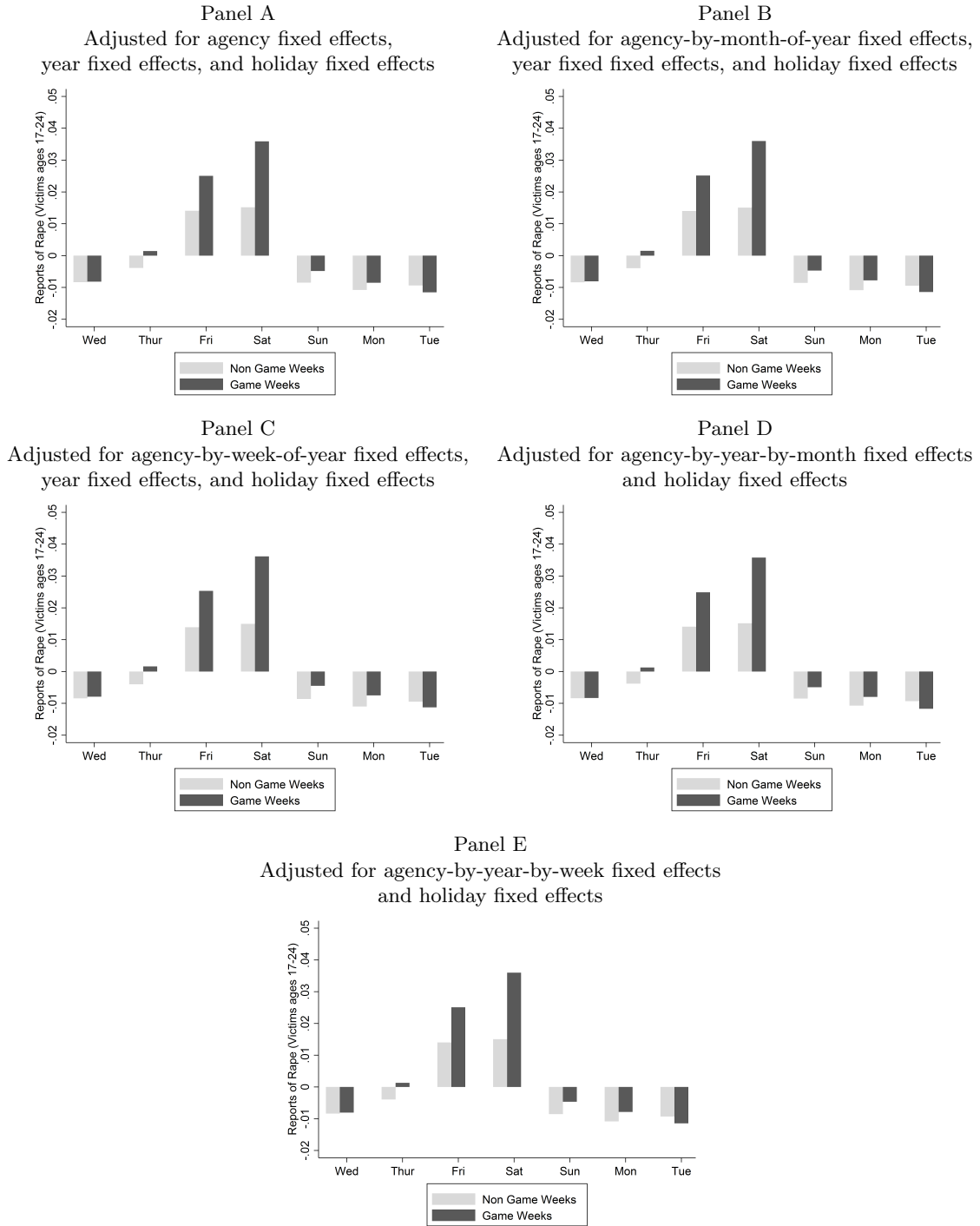and holiday fixed effects

Figure A2: *Residualized* Daily Reports of Rape Per Agency on Saturday Game Weeks and Non-Game Weeks

Note: See Figure V. Additionally note that the residualized number of reports are calculated as the actual number minus the number predicted by a Poisson model with the relevant controls variables listed in each panel heading.
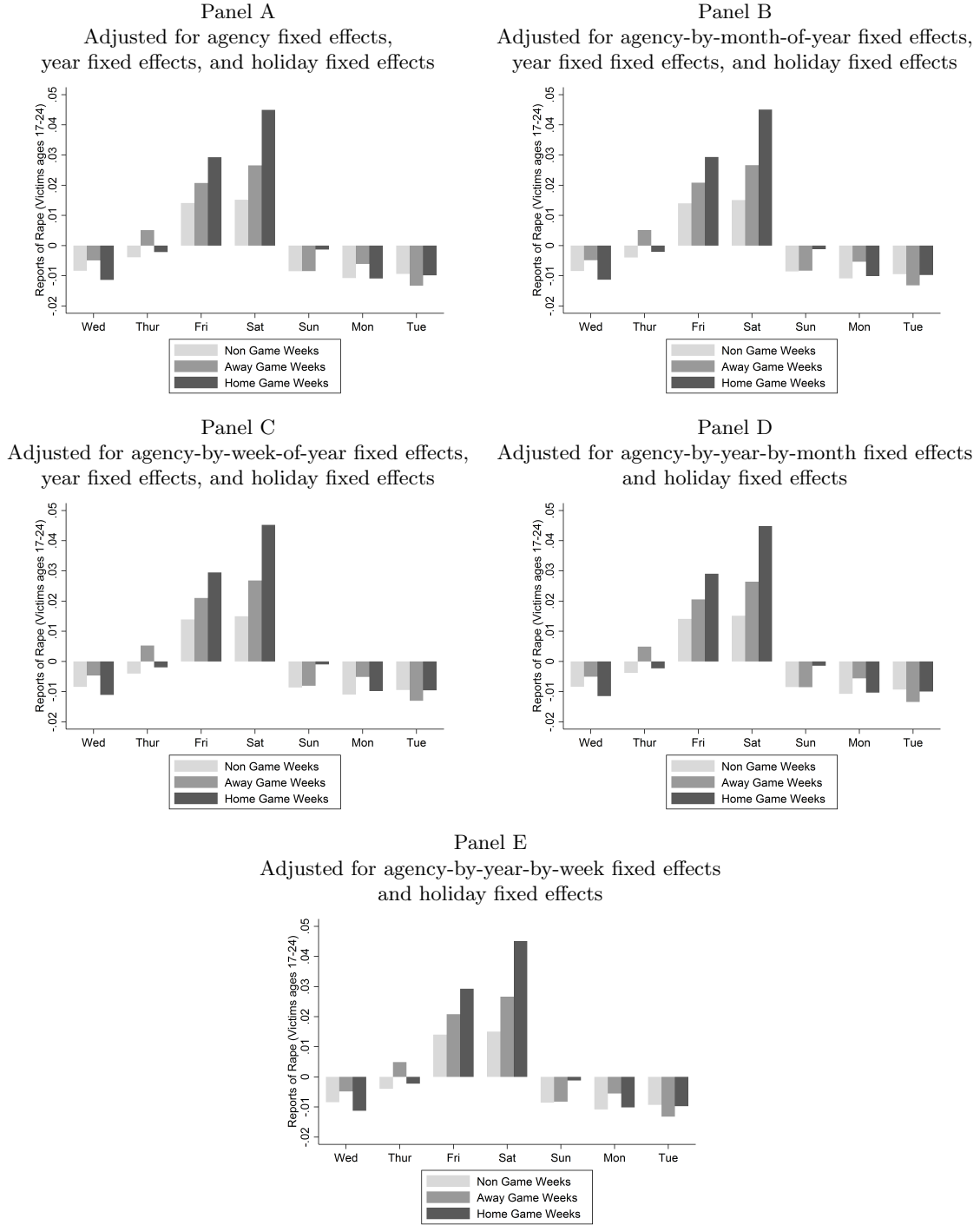
Panel A
Adjusted for agency fixed effects, year fixed effects, and holiday fixed effects

Panel B
Adjusted for agency-by-month-of-year fixed effects, year fixed fixed effects, and holiday fixed effects

Panel C
Adjusted for agency-by-week-of-year fixed effects, year fixed effects, and holiday fixed effects

Panel D
Adjusted for agency-by-year-by-month fixed effects and holiday fixed effects

Panel E
Adjusted for agency-by-year-by-week fixed effects and holiday fixed effects

Figure A3: *Residualized* Daily Reports of Rape Per Agency on Saturday Game Weeks and Non-Game Weeks, Separating Home and Away Game Weeks

Note: See Figure V. Additionally note that the residualized number of reports are calculated as the actual number minus the number predicted by a Poisson model with the relevant controls variables listed in each panel heading.

Table A1: List of Division 1 Schools, Corresponding Law-Enforcement Agencies, and Rivals

School	Agencies (Years in NIBRS)	Rival(s)
Air Force Academy	Colorado Springs Police Dept (1997-2012)	Colorado State, Hawaii
Alabama State Univ	Alabama State Univ Police (1991-1992)	Tuskegee
Arkansas State Univ	Arkansas State Univ Police Dept. (2003-2012)	Memphis
	Jonesboro Police Dept (2003-2012)	
Auburn Univ	Auburn Police Dept (1991-1992)	Alabama, Georgia
Austin Peay State Univ	Clarksville Police Dept (1997-2012)	Murray State
	Austin Peay State Univ Police (1997-2012)	
Boise State Univ	Boise Police Dept (1992-2012)	Fresno State, Idaho, Nevada
Bowling Green State Univ	Bowling Green Police Division (2006-2012)	Kent State, Toledo
	Bowling Green State Univ Police (2011-2012)	
Brigham Young Univ	Provo Police Dept (1992-2012)	Utah, Utah State
	Brigham Young Univ (1995-2012)	
Brown Univ	Providence Police Dept (2006-2012)	Rhode Island, Harvard
Bryant Univ	Smithfield Police Dept (2004-2012)	
Central Connecticut State Univ	C Connecticut State Univ Police (1998-2012)	Sacred Heart (CT)
Central Michigan Univ	C Michigan Univ Police Dept (1995-2012)	Eastern Michigan, Western Michigan
	Mount Pleasant Police Dept (1995-2012)	
Charleston Southern Univ	North Charleston Police Dept (1991-2012)	Coastal Carolina
Clemson Univ*	Clemson Police Dept (1991-2012)	South Carolina, North Carolina State
	Clemson Univ Police (1991-2012)	
Coastal Carolina Univ	Coastal Carolina Univ Police Dept (2003-2012)	Charleston Southern (SC), Liberty
	Conway Police Dept (2003-2012)	
College of William & Mary	William & Mary College Campus Police (1998-2012)	Richmond, James Madison
	Williamsburg Police Dept (1997-2012)	
Colorado State Univ	Fort Collins Police Dept (2006-2012)	Air Force, Wyoming, Colorado
	Colorado State Univ Police Dept (2006-2012)	
Dartmouth College	Hanover Police Dept (2003-2012)	New Hampshire
Drake Univ	Des Moines Police Dept (1991-2012)	
East Carolina Univ	Greenville Police Dept (1991-2012)	N. Carolina St, Marshall, S. Mississippi, N. Carolina
Eastern Illinois Univ	Charleston Police Dept (1993-1994)	Illinois State
Eastern Kentucky Univ	Richmond Police Dept (2001-2012)	Western Kentucky
Eastern Michigan Univ	E Michigan Univ Police Dept (1995-2012)	Western Michigan, Central Michigan
Eastern Washington Univ	Cheney Police Dept (2009-2012)	Montana
Hampton Univ	Hampton Police Dept (2000-2012)	Norfolk State, Howard
Idaho State Univ	Pocatello Police Dept (1992-2012)	Weber State, Montana
Illinois State Univ	Normal Police Dept (1993-1994)	Eastern Illinois
Iowa State Univ	Iowa State Univ Police (1992-2012)	Iowa, Kansas State, Missouri
	Ames Police Dept (1992-2012)	
Jacksonville State Univ	Jacksonville St Univ Police Dept (1991-1992)	Troy, Samford
	Jacksonville Police Dept (1991-1992)	
James Madison Univ	Harrisonburg Police Dept (1997-2012)	Delaware, William & Mary
Kansas State Univ	Riley County Police Dept (2000-2012)	Kansas, Iowa State, Nebraska
	Kansas St Univ Police Dept (2001, 2003-2012)	
Liberty Univ	Lynchburg Police Dept (2000-2012)	Coastal Carolina
Marshall Univ	Huntington Police Dept (2000-2012)	Ohio, East Carolina, West Virginia
	Marshall Univ Police Dept (1999-2012)	
Michigan State Univ*	East Lansing Police Dept (2000-2012)	Indiana, Penn State , Michigan, Notre Dame
	Michigan St Univ Police Dept (2000-2012)	
Middle Tennessee State Univ	Murfreesboro Police Dept (1998-2012)	Troy, Western Kentucky
	Middle Tennessee St Univ Police (1997-2012)	
Montana State Univ	Bozeman Police Dept (2005-2012)	Montana
Morehead State Univ	Morehead Police Dept (2001-2005, 2008-2012)	Eastern Kentucky
Murray State Univ	Murray Police Dept (2000-2004, 2008-2012)	Western Kentucky
Norfolk State Univ	Norfolk State Univ Police (1997-2012)	Hampton (Va)
North Dakota State Univ	North Dakota State Univ Police (1997-2012)	South Dakota State, North Dakota
	Fargo Police Dept (1991-2012)	
Northern Illinois Univ	Northern Illinois Univ Police (1993-1994)	Toledo, Ball State
Ohio State Univ*	Columbus Police Dept (2003-2012)	Illinois, Michigan, Penn State
	Ohio State Univ Police Dept (2003-2012)	
Ohio Univ	Athens Police Dept (2003-2012)	Marsharll, Miami (OH)
Old Dominion Univ	Old Dominion Univ Police Dept. (2009-2012)	James Madison
	Norfolk Police Dept (2009-2012)	
Oregon State Univ	Corvallis Police Dept (2003-2012)	Oregon, Washington, Washington State
Presbyterian College	Clinton Dept of Public Safety (1991-2012)	Newberry
	Presbyterian Col (1997-00, 2002-04, 2007-08, 2012)	
Sacred Heart Univ	Fairfield Police Dept (2001-2012)	Central Connecticut State
South Carolina State Univ	S. Carolina State Univ Police Dept (1991-2012)	North Carolina A&T
South Dakota State Univ	Brookings Police Dept (2001-2006, 2008-2012)	North Dakota State, South Dakota
Southern Illinois Univ Carbondale	Carbondale Police Dept (1993-1994)	Northern Iowa, Southeast Missouri State
Tennessee State Univ	Tennessee State Univ (1997-2012)	
Texas Christian Univ	Fort Worth Police Dept (2005-2012)	Baylor, Southern Methodist, Texas Tech
Texas State Univ	San Marcos Police Dept (2002-2007)	Nicholls State, Sam Houston State
The Citadel	Citadel Public Safety (1991-2001, 2003-2012)	Virginia Military Institute, Furman
	Charleston Police Dept (1991-2012)	
Univ Northern Iowa	Cedar Falls Police Dept (1992-2012)	Iowa, Iowa State, N. Dakota State, S. Illinois
	Univ of Northern Iowa Police (1992-2012)	
Univ Toledo	Univ of Toledo Police Dept (2012)	Bowling Green State
Univ of Akron	Akron Police Dept (1998-2012)	Kent State
Univ of Alabama*	Tuscaloosa Police Dept (1991-1992)	Auburn, Louisiana State, Tennessee
	Univ of Alabama Pd Univ (1991-1992)	
Univ of Alabama-Birmingham	Birmingham Police Dept (1991-1992)	Southern Mississippi, Troy
Univ of Arkansas	Univ of AK - Fayetteville Police (2007-2012)	Louisiana State, Texas, Mississippi, Texas A&M
	Fayetteville Police Dept (2003-2012)	
Univ of Arkansas as Pine Bluff	Pine Bluff Police Dept (2009-2012)	
Univ of Cincinnati	Cincinnati Police Dept (1998-2012)	Miami (OH), Louisville, Pittsburgh
Univ of Colorado Boulder*	Univ of Colorado - Boulder Police Dept (1997-2012)	Nebraska, Colorado State, Utah
	Boulder Police Dept (2010-2012)	
Univ of Connecticut	Univ of Connecticut Police (1998-2012)	Massachusetts, Rutgers
Univ of Dayton	Dayton Police Dept (1998-2012)	
Univ of Idaho	Moscow Police Dept (1992-2012)	Boise State, Washington State
Univ of Illinois Urbana-Champaign*	Champaign Police Dept (1993-1994)	Missouri, Northwestern, Purdue , Ohio State
	Univ of Illinois Police Dept (1993-1994)	
Univ of Iowa*	Univ of Iowa (1996, 1998-2012)	Minnesota, Iowa State, Nebraska, Wisconsin
	Iowa City Police Dept (1993-2012)	
Univ of Kansas*	Univ of KS Police Dept (2001-2009, 2011-2012)	Nebraska, Missouri, Kansas State
	Lawrence Police Dept (2001-2012)	
Univ of Kentucky	Univ of KY Police Dept (2002-2005, 2008-2012)	Louisville, Mississipi State, Tennessee, Vanderbilt
	Lexington Division of Police (2011-2012)	

School	Agencies (Years in NIBRS)	Rival(s)
Univ of Louisville	Univ of Louisville Police Dept (2009-2012)	Cincinnati, Kentucky, Memphis
Univ of Massachusetts*	Amherst Police Dept (2002-2012) Univ of Mass - Amherst Police (1995-2012)	Boston College, Connecticut
Univ of Memphis	Memphis Police Dept (2000-2012) Univ of Memphis Police (1998-2012)	Southern Mississippi
Univ of Michigan*	Ann Arbor Police Dept (2003-2012) Univ of MI Flint Dept of Public Safety (1995-2012)	Michigan State, Notre Dame, Ohio State, Minnesota
Univ of New Hampshire*	Durham Police Dept (2008-2012)	Dartmouth, Maine, Massachusettes
Univ of North Texas	Denton Police Dept (2002-2012)	Southern Methodist
Univ of Northern Colorado	Greeley Police Dept (2005-2012)	
Univ of Richmond	Williamsburg Sheriff'S Dept (1998-2012)	William & Mary
Univ of South Carolina*	Univ of S. Carolina Law Enf & Saf (1991-2012) Columbia Police Dept (1991-2012)	Clemson, Georgia
Univ of South Dakota	Vermillion Police Dept (2001-2012)	South Dakota State
Univ of Tennessee*	Knoxville Police Dept (2000-2012) Univ of Tennessee at Knoxville Police (1997-2012)	Kentucky, Vanderbilt, Alabama, Florida
Univ of Texas at Austin*	Austin Police Dept (1997-2003)	Oklahoma, Texas A&M, Texas Tech, Arkansas
Univ of Texas at El Paso	El Paso Police Dept (2004-2007)	New Mexico State
Univ of Utah	Salt Lake City Police Dept (1999-2012) Univ of Utah Police Dept (1993-2003)	Brigham Young, Utah State
Univ of Virginia	Charlottesville Police Dept. (1997-2012) Univ of Virginia Police Dept (1997-2012)	North Carolina, Virginia Tech
Univ of Washington	Seattle Police Dept (2012)	Washington State, Oregon
Utah State Univ	Logan Police Dept (1993-2012) Utah State Univ Police Dept (2005-2012)	Wyoming, Utah, Brigham Young
Vanderbilt Univ	Nashville Metro Police Dept (1999-2012) Vanderbilt Univ (1997-2012)	Georgia, Kentucky, Mississippi, Tennessee
Virginia Tech*	Virginia Polytechnic Institute Police (2004-2012) Blacksburg Police Dept (1995-2012)	West Virginia, Virginia, Miami
Washington St Univ	Washington St Univ Police Dept (2011-2012) Pullman Police Dept (2006-2012)	Washington, Idaho
Weber State Univ	Ogden Police Dept (2001-2012)	
West Virginia Univ*	West Virginia Univ Police Dept. (2001-2012) Morgantown Police Dept (1999-2012)	Pittsburgh, Maryland, Syracuse, Virginia Tech
Western Illinois Univ	Macomb Police Dept (1993-1994)	
Western Kentucky Univ	Western Kentucky Univ Police (2009-2012) Bowling Green Police Dept (2008-2012)	Murray State, E Kentucky, Middle Tennessee St
Western Michigan Univ	Kalamazoo Dept of Public Safety (2000-2012) Western MI Univ Police Dept (1995-2012)	Eastern Michigan, Central Michigan
Youngstown State Univ	Youngstown Police Dept (2004-2012)	Akron

*School is listed at least once in the top 20 of the Princeton Party School Rankings from 2001-2012.

Table A2: Universities Included in Analysis Compared to All With Division 1 Football

	NIBRS-Matched Schools	All Schools
Panel A: School Characteristics, IPEDS		
Schools	96	245
Enrollment	13,228	12,057
SAT writing 25th percentile score	490	507
SAT writing 75th percentile score	597	610
SAT critical Reading 25th percentile score	492	505
SAT critical Reading 75th percentile score	604	613
SAT math 25th percentile score	507	520
SAT math 75th percentile score	619	628
Retention rate (%)	79	81
Fraction private schools	0.15	0.26
Fraction receiving federal-grant aid	0.27	0.27
Fraction receiving student-loan aid	0.48	0.47
Fraction receiving any financial aid	0.78	0.79
Fraction male	0.48	0.48
Fraction female	0.52	0.52
Fraction White	0.74	0.68
Fraction Black	0.12	0.15
Fraction Asian	0.03	0.05
Fraction Hispanic	0.04	0.05
Panel B: Law Enforcement Agency Statistics, UCR		
Fraction Municipal Agencies	0.57	0.58
Number of Residents	78,743	81,448
Annual reports of rape per 10,000	1.10	1.10
Panel C: Football Performance Statistics, Sports Reference		
Season winning percentage	0.53	0.51
Fraction home games	0.49	0.49
Fraction of seasons with bowl game participation	0.23	0.20
Fractions of schools in NCAA Subdivision 1A	0.56	0.51

Note: This table shows how the 96 universities that are matched to agencies participating in NIBRS compared to all 245 universities with Division 1 football programs between 1991 and 2012. Panel A is based on data from the Integrated Postsecondary Education Data System (IPEDS) from 1991–2012 (the years of our analysis of sexual assault). Panel B shows how the law-enforcement agencies whose data are used in our analysis compare to the broader set of agencies associated with universities participating in Division 1 football that can be identified in Uniform Crime Reports (UCR) data, which covers agencies serving approximately 95 percent of the U.S. population. We note that Uniform Crime Reports (UCR) data are not suitable for our main analysis because they are aggregated and lack details on the timing of incidents. Panel C shows how the football programs at the universities represented in our analysis compare to all Division 1 football programs, based on data from sports-reference.com.

Table A3: Robustness to Dates Included in the Analysis

	Main Sample (1)	Fall Sep–Dec (2)	Football Reg Season (3)	Omitting Sept (4)	Omitting Oct (5)	Omitting Nov (6)	Omitting Dec (7)
Day before home game	0.178***	0.140*	0.129	0.192*	0.152**	0.221***	0.194***
	(0.067)	(0.077)	(0.082)	(0.100)	(0.066)	(0.073)	(0.067)
Home game day	0.343***	0.379***	0.352***	0.361***	0.300***	0.377***	0.344***
	(0.069)	(0.084)	(0.069)	(0.091)	(0.076)	(0.068)	(0.066)
Day after Home Game	0.125**	0.133	0.150*	0.113*	0.103	0.165**	0.126**
	(0.057)	(0.095)	(0.085)	(0.069)	(0.066)	(0.077)	(0.054)
Day before away game	0.029	-0.008	-0.012	0.003	0.027	0.054	0.049
	(0.058)	(0.067)	(0.078)	(0.069)	(0.071)	(0.069)	(0.060)
Away Game Day	0.136**	0.173***	0.162**	0.161***	0.138**	0.109	0.135***
	(0.054)	(0.067)	(0.063)	(0.058)	(0.067)	(0.067)	(0.052)
Day after Away Game	-0.070	-0.061	-0.033	-0.070	-0.074	-0.093	-0.064
	(0.070)	(0.100)	(0.081)	(0.086)	(0.097)	(0.079)	(0.074)
Schools	96	94	93	96	95	96	94
Agencies	138	136	135	138	134	137	136
N	77,191	35,984	31,994	67,429	67,010	67,861	68,765
Day-of-Week FE	yes	yes	yes	yes	yes	yes	yes
Holiday Controls	yes	yes	yes	yes	yes	yes	yes
Agency by Year by Week FE	yes	yes	yes	yes	yes	yes	yes

Note: These estimates consider the same outcome (reports of 17–24 year old rape victims to an agency on a given day) using the same Poisson model as Column (5) of Table 3 (including agency-by-year-by-week fixed effects, day-of-week fixed effects, and holiday controls). See Table 3 for additional details. The main sample includes all months of the year excluding June, July, and August. The "Football Regular Season" is defined for each school and year based on the team's first game (minus six days) and last regular season game (plus six days).
*, **, and *** indicate statistical significance at the ten, five, and one percent levels, respectively.

Table A4: Estimated Effects on the Probability that a Report Leads to Arrest

Day before home game	-0.007
	(0.023)
Home game day	-0.030
	(0.033)
Day after home game	-0.036
	(0.031)
Day before away game	0.028
	(0.036)
Away game day	0.030
	(0.025)
Day after away game	-0.011
	(0.024)
Schools	95
Agencies	137
N	21,298

Note: These estimates consider whether reports of rape of 17–24 year old rape victims lead to arrest. Estimates are based on a linear probability model using incident-level data (excluding June, July, and August) spanning 1991–2012 for law-enforcement agencies participating in the National Incident Based Reporting System that have been matched to universities participating in Division 1 football. The model additionally controls for agency-by-year-by-week fixed effects, day-of-week fixed effects, and holiday controls. For incidents involving a single victim and multiple perpetrators (20 percent), we classify an incident as leading to an arrest if any perpetrator is arrested. For incidents involving multiple victims (6.5 percent), we cannot verify that the person arrested for rape was arrested for the rape of the 17-24 year old victim but nonetheless classify an incident as leading to an arrest in such circumstances. Standard-error estimates are clustered at the university level.
*, **, and *** indicate statistical significance at the ten, five, and one percent levels, respectively.