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What is This?
Rethinking Sports-Based Community Crime Prevention

A Preliminary Analysis of the Relationship Between Midnight Basketball and Urban Crime Rates

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The authors conducted a preliminary empirical test of the claim—dismissed by most scholars—that midnight basketball programs lower city-level crime rates. Results show cities that were early adopters of officially sanctioned midnight basketball leagues experienced sharper decreases in property crime rates than other American cities during a period in which there was broad support for midnight basketball programs. Although likely associated with a variety of confounding factors, these rather-surprising results suggest the need to reevaluate the deterrent effects of popular sports- and recreation-based prevention programs with a new emphasis on more diffuse, indirect mechanisms such as positive publicity and community trust. Further substantiation and refinement of these ideas could significantly reshape how these popular and well-established initiatives are implemented and evaluated.

Keywords: midnight basketball; sports; crime prevention; urban crime rates; publicity effects

A transformation occurred in youth sports and recreation provision in the United States in the 1990s. Sports and recreation programs became popular tools for crime prevention, particularly prevention aimed at so-called at-risk or high-risk minority populations. Hard numbers on this movement—christened the “social problems industry” in urban sports and recreation provision by Robert Pitter and David Andrews (1997; see also Schultz, Crompton, & Witt, 1995)—do not exist. However, anyone working in or around youth sports knows the phenomenon well.

Authors’ Note: We express our gratitude for invaluable support and advice to Chris Uggen, Mike Massoglia, Ross MacMillan, Jim Nonnemaker, and Darren Wheelock. Thanks also go to Roman Postle for senior project research that prepared the way for this analysis. Please direct all correspondence to Douglas Hartmann, 909 Social Science Tower, Department of Sociology, University of Minnesota, Minneapolis, MN 55455; e-mail: hartm021@unm.edu.
In 1997, the National Recreation and Parks Association identified some 621 pilot programs focused specifically on reaching “at-risk” youth (Witt & Crompton, 1997). If we take those pilot programs and multiply them by the number of participants they served, the numbers are impressive. Add in the number of participants in comparable formal and informal projects implemented by organizations such as the YMCA, Boys and Girls Clubs, Police Athletic Leagues, schools and community centers, and other such institutions all across the country, and the scale and scope of this industry is impossible to ignore. Dozens of such programs—some innovative new programs, others simply revamped and repackaged as crime prevention—now exist in every metropolitan region in the country and serve hundreds of thousands of young people annually. The continuing popularity of sports and recreation as tools for crime prevention and risk reduction has been evidenced most recently by First Lady Laura Bush’s decision to make after-school programs—many of which employ athletic components—one of her intended focal points during her husband’s second term (see U.S. Department of Health and Human Services, n.d.).

The movement has been popular for at least two key reasons. One is that these programs are relatively inexpensive and easy to implement. In an era of declining public resources for outreach and social intervention of any kind, sports-based programs have been viewed as a cost-effective way to implement policy. These initiatives are not only easily adapted to existing facilities and programming but also often attract funding and support from foundations, nonprofit organizations, and even corporate sponsorships. Every one of the 19 programs highlighted in a 1994 National Park and Recreation Association (NRPA) report (Tindall, 1995), for example, was based in some kind of public-private partnership. The second factor that helps account for widespread appeal of this approach has to do with long-held and deeply entrenched cultural beliefs about sports as a positive, progressive social force. At least since the play movement of the progressive era (Cavallo, 1981; Macleod, 1983; Riess, 1989), sports has been believed to be an inherently positive, prosocial force for adolescents and young adults—an activity that would not only keep young people off the streets and out of trouble but would also build character, cultivate self-discipline, and provide proper socialization, role models, and opportunities for advancement and mobility (see Coakley, 2002, for a critical summary and discussion).

However, for all the popularity and prominence of sports-based crime prevention, scholars and policy makers have generated surprisingly little evidence that such initiatives are actually effective in reducing risk and preventing crime. The most comprehensive and rigorous survey of the social scientific literature on crime prevention (Sherman et al., 1998), for example, lists only one scholarly study that focuses explicitly on recreation-based programs, and its findings about community-based, after-school recreation programs are limited and contradictory at best (Howell, 1995). More recent efforts at analysis and evaluation have begun to identify model program characteristics (Witt & Crompton, 1996); however, these have still been fairly limited and lacking in appropriate scientific controls or comparisons (see, for discussions, Nichols & Crow, 2004; Witt & Crompton 1997). Others (Jacob &
Lefgren, 2003) have even suggested that these programs might have the potential to increase juvenile crime and delinquency by concentrating young people who are potentially at risk together, thus reinforcing antisocial tendencies and facilitating deviant peer-group subculture. And, more directly to the point of this article, these analyses have virtually dismissed the whole question of broad, community-level effects where the claims and potential impacts are far greater. Suffice it to say that the general scholarly consensus is that we still lack any reliable evidence on the effectiveness (or ineffectiveness) of such sports- and recreation-based interventions (Mulvey, Arthur, & Reppucci, 1993; Sherman et al., 1998). Even strong public advocates of sports- and recreation-based interventions have been forced to concede, “[T]here is a lack of robust evidence of the direct impact of sports and physical activity on antisocial behavior and the sustainability of any outcomes” (Morris, Sallybanks, Willis, & Makkai, 2003, p. 2).

This article is intended to reconsider the effectiveness of this social problems industry in sports-based crime prevention by examining one important and ignored aspect of a program that has been called the “catalyst and template” (Pitter & Andrews, 1997, p. 93) of this entire movement. The program is midnight basketball. The claim is that late-night basketball leagues targeting young inner-city men of color have broad, community-level effects on crime.

The Case of Midnight Basketball2

The idea of midnight basketball was originally conceived and implemented by a former town manager in Prince George’s County, Maryland, named G. Van Standifer in the late 1980s. Standifer had become convinced that one of the keys to the problems of young men who were poor and from the inner city was the absence of safe, constructive activities between the hours of 10:00 p.m. and 2:00 a.m. His solution was to organize a basketball league that would operate in his Washington, D.C., area during these “high crime” hours. Standifer’s basketball-based program was intriguingly simple. It operated only during summer months and had only three core components: first, that the target group was young men between the ages 17 and 21 years; second, that no game could begin before 10:00 p.m., and third, that two uniformed police officers had to be present and visible at each game.

The midnight basketball concept came to national prominence in the fall of 1989 when the Chicago Housing Authority—with a matching grant of U.S. $50,000 from the Department of Housing and Urban Development (HUD) under the direction of Jack Kemp, the former congressman who had made his reputation as a professional football star and star advocate of the Reagan administration’s supply-side economics—organized late-night basketball leagues on Standifer’s model in two of its notoriously troubled “housing communities” (the Rockwell Gardens and the Henry Horner Homes). Even before the leagues had held their first game or even signed up a single player, the initiative was a public relations coup. Within weeks, the program was
featured on ABC’s *Good Morning America*, one of NBC television’s National Basketball Association (NBA) national broadcasts, and in dozens of newspapers and magazines across the country. Buoyed by the success of the Chicago project, midnight basketball went national. An official organization was created and incorporated and began sanctioning affiliate chapters. Dozens signed up all across the country, and countless more copycat programs were created or remodeled. So impressive was the effort and so positive the publicity that start-up grants for late-night basketball leagues were included in Section 520 of the Cranston-Gonzalez National Affordable Housing Act passed in the final years of the George H. Bush presidential administration, and in the spring of 1991 the president proclaimed the National Association of Midnight Basketball, Inc., and its founders one of his official “thousand points of light” (Wilbon, 1991).

Key to the acclaim that midnight basketball programs initially enjoyed were the extraordinary impacts that operators claimed these programs had on crime rates in the metropolitan areas where they were adopted. In championing his basketball-based initiative, Standifer, for example, took credit for a 30% drop in crime in Glenarden, Maryland, in the first 3 years of the program (a figure doubled by the president in the national ceremony honoring Standifer and his prototype program). Other programs quickly followed suit, often with support from local law enforcement and scholars. Farrell, Johnson, Sapp, Pumphrey, and Freeman (1996), for example, claimed that the Milwaukee-area basketball program they studied produced a 30% reduction in crime, and McCann and Peters (1996) claimed that a Phoenix project resulted in 10.4% fewer juvenile arrests and a 50% reduction in juvenile incidents reported to the police.3

It was not long before these figures came under heavy scrutiny from scholars and policy makers. Policy analysts realized right away that these claims were far from scientific, lacking even the most basic comparisons or controls. Experts also knew that all categories of crime were then dropping sharply in all regions of the country (Blumstein & Wallman, 2000; Levitt, 2004); thus, it began to appear likely that these purported claims were classic spurious correlations. Furthermore, as politicians, policy makers, and the public learned more about the actual design and operation of these programs, many came to develop very reasonable doubts about the claims that having just a few hundred young men who were at risk (out of tens of thousands) play basketball several nights a week for a few months a year could produce these kinds of effects. The original Maryland program, for example, had only 60 participants during its 1st year of operation and involved only 84 in 1988, the year in which it was “discovered” by the national media. The widely touted Chicago leagues were designed to serve a total of 160 participants—which may be impressive as a basketball league but pales in comparison to the estimated 6,600 young adults who were at risk residing in the two targeted public housing projects, much less to the 85,000 who lived in public housing across the city and the thousands more who did not. These criticisms of midnight basketball came together in the context of the 1994
crime bill debates where conservative critics lambasted these programs, which had been picked up by the Clinton administration, as symbolic of the shortcomings of liberal approaches to crime prevention (Wheelock & Hartmann, forthcoming).

Midnight basketball did not disappear, however. Since the attacks of 1994, program administrators and officials still committed to this initiative have worked hard to reconceptualize and redesign midnight basketball programming, focusing on building in and bulking up outreach and intervention elements such as life skills training and conflict resolution, drug prevention, educational counseling, and job training. These reforms have been consistent with recent theoretical work in the area that sees sports as a device for recruiting and retaining youth and young men who are at risk (a “hook” as it were) where genuine effectiveness focuses on individual program participants, relies on nonsports elements, and requires intensive collaboration and engagement with a range of preventative measures (Baldwin, 2000; Coakley, 2002; Carreira, 1997; Hartmann, 2003; Hartmann & Wheelock, 2002; Witt & Crompton, 1997).

The jury is largely still out on the effectiveness of these program-level innovations and reformulations. What has disappeared in all of this, as far as we can determine, is the claim that Standifer and President Bush initially put forward (and that continues to make sports-based crime prevention policies appealing): namely, that sports-based crime prevention programs like midnight basketball could have community-level effects on crime and delinquency. Is it possible that G. Van Standifer and George Bush were onto something? Do midnight basketball programs have broad community-level effects?

Using some fairly basic quantitative measures and statistical techniques, we take an important first step toward answering these questions. Our analysis suggests that the claim that midnight basketball can have broad, community-level effects cannot be brushed aside easily. Moreover, some of the findings point to mechanisms that might help account for these effects. In view of these conclusions, it is worth noting that we were not initially inclined to answer questions about the community-level effects of midnight basketball (or any other sports-based programs) affirmatively. In fact, we initiated this project largely because we believed a quantitative test of these claims about broad community-level effects—which had made midnight basketball and the movement it spawned so politically appealing—would reveal their inadequacy and thus refocus future theoretical development, program design, and funding support on the more conventional, individualist outreach and intervention dimensions outlined above. As is so often the case, however, the empirical world proved resistant and obligated us to reexamine some of the core assumptions of scholarly theory and research on the role of sports-based programs in prevention and social intervention. It is an exercise we believe is not only of scholarly and theoretical significance but could give rise to a whole new way of approaching program implementation and evaluation for this broad class of sports- and recreation-based risk reduction initiatives.
Data and Method

The current study uses annual crime data from 1985 to 2001 compiled by the U.S. Department of Justice from the FBI’s Uniform Crime Reports (U.S. Department of Justice, Bureau of Justice Statistics, 2003). Crime rates are defined as the number of offenses reported to law enforcement per 100,000 people. We used two common categories of offenses, violent offenses and property offenses, and restricted the data set to cities with populations of more than 100,000. We also supplemented the data set with city-level demographic data collected from the U.S. Census Bureau’s 1994 City and County data book provided by the University of Virginia’s Geospatial and Statistical Data Center (U.S. Department of Commerce, 1994).

Our initial research strategy was simple and straightforward. We planned to identify cities that had midnight basketball programs and then compare changes in crime rates for those cities (our treatment set) against those for cities that did not have such programs in place (all other American metropolitan areas). Although many cities today boast some kind of basketball-based outreach and intervention programming, we wanted to focus exclusively and specifically on cities that were “early adopters” of Standifer’s official midnight basketball model. We also decided to focus our analysis on the crucial 3-year period between 1990 and 1994 when the midnight basketball initiative first came into being and before bipartisan support for it collapsed and radically transformed the entire enterprise.

Identifying cities that had midnight basketball leagues (necessary for constructing our independent variable or treatment group) turned out to be more difficult than we had initially anticipated. Various secondary and archival sources suggest that by the 1990–1991 season, when Standifer took the program national, Standifer’s Midnight Basketball League (MBL), Incorporated, had certified programs in some 38 to 40 cities nationwide. Unfortunately, because of poor record keeping and infighting in the midnight basketball organization that followed Standifer’s untimely death in 1992, it is impossible to verify when each of these cities formally affiliated with the national chapter. Eventually, we located an undated list of 40 cities that current program officers believe was compiled sometime early in the decade, so we took this as our reference point. After eliminating programs in cities with fewer than 100,000 people and cities without crime data, we derived a list of some 29 cities that were early adopters of officially sanctioned and affiliated midnight basketball leagues (see Table 1). This was, in other words, our treatment group.

When these cities were identified, we plotted their average violent and property crime rates across the period from 1985 to 2001 and set it against the rates for cities without midnight basketball (all other American cities with populations of more than 100,000; see Figures 1 and 2).

These plots showed that cities with midnight basketball programs had consistently higher rates of property and violent crime for the period 1985 to 2001 as compared with cities without the programs (an interesting finding in itself), and that the crime
rates for both groups of cities and for both categories of crime peaked around 1989 and began to decline steadily thereafter. Preliminary visual inspection also suggested that the crime rates in cities that adopted midnight basketball appeared to decline somewhat faster than in cities without the programs (i.e., the gap between the two groups of cities appears to narrow over the crucial 3-year period). Our primary analytic tasks, then, were threefold: (a) to determine if these rate changes were greater in cities with midnight basketball than for those without it; (b) if so, to assess the magnitude of this effect; and (c) to test whether any effects held after introducing controls for other factors often thought to be associated with urban crime rates.

Table 1
Early Adopters of Official Midnight Basketball Leagues

<table>
<thead>
<tr>
<th>City</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Beach</td>
<td>CA</td>
</tr>
<tr>
<td>Oakland</td>
<td>CA</td>
</tr>
<tr>
<td>San Diego</td>
<td>CA</td>
</tr>
<tr>
<td>San Francisco</td>
<td>CA</td>
</tr>
<tr>
<td>San Jose</td>
<td>CA</td>
</tr>
<tr>
<td>Bridgeport</td>
<td>CT</td>
</tr>
<tr>
<td>Miami</td>
<td>FL</td>
</tr>
<tr>
<td>Orlando</td>
<td>FL</td>
</tr>
<tr>
<td>Tampa</td>
<td>FL</td>
</tr>
<tr>
<td>Atlanta</td>
<td>GA</td>
</tr>
<tr>
<td>Chicago</td>
<td>IL</td>
</tr>
<tr>
<td>Indianapolis</td>
<td>IN</td>
</tr>
<tr>
<td>New Orleans</td>
<td>LA</td>
</tr>
<tr>
<td>Detroit</td>
<td>MI</td>
</tr>
<tr>
<td>St. Louis</td>
<td>MO</td>
</tr>
<tr>
<td>Durham</td>
<td>NC</td>
</tr>
<tr>
<td>Jersey City</td>
<td>NJ</td>
</tr>
<tr>
<td>Paterson</td>
<td>NJ</td>
</tr>
<tr>
<td>Albany</td>
<td>NY</td>
</tr>
<tr>
<td>New York City</td>
<td>NY</td>
</tr>
<tr>
<td>Cleveland</td>
<td>OH</td>
</tr>
<tr>
<td>Columbus</td>
<td>OH</td>
</tr>
<tr>
<td>Dayton</td>
<td>OH</td>
</tr>
<tr>
<td>Columbia</td>
<td>SC</td>
</tr>
<tr>
<td>Austin</td>
<td>TX</td>
</tr>
<tr>
<td>Dallas</td>
<td>TX</td>
</tr>
<tr>
<td>Houston</td>
<td>TX</td>
</tr>
<tr>
<td>San Antonio</td>
<td>TX</td>
</tr>
<tr>
<td>Richmond</td>
<td>VA</td>
</tr>
</tbody>
</table>

Note: a. One city (Orlando, FL) was excluded because complete crime statistics for the analysis period were not available.
The analysis we report here thus consists of a three-step process replicated for violent and property crime rates. First, we calculated the change in average crime rates for both sets of cities between 1990–1991 and 1993–1994 and then used a distribution-free rank sum test (the Wilcoxon test; Hollander & Wolfe, 1999) to determine whether one group of cities tends to have smaller or larger observations of change in crime rates than the other.5 To compute the Wilcoxon rank sum statistic, we ordered all city crime-rate changes from least to greatest. Next, we summed the ranks assigned to the cities with midnight basketball programs; this is the test statistic for the procedure. When a difference in location exists, the sum of midnight basketball city ranks will be small or large compared to the expected value of the sum of ranks under the null hypothesis of no differences in location.

The second step was to quantify the size of the differences revealed in the first test and the associated confidence intervals for these estimates. Here we computed all pairwise differences of crime rates between cities and ordered these differences. The estimator associated with the Wilcoxon rank sum statistic is the median value of these ordered pairwise differences. The associated symmetric two-sided confidence intervals can also be found using these pairwise differences and procedures described by

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**Figure 1**

Violent Crime Rates for U.S. Cities With Population Greater Than 100,000: 1985 to 2001

![Violent Crime Rates for U.S. Cities With Population Greater Than 100,000: 1985 to 2001](image)
Hollander and Wolfe (1999). This estimator has the advantage of being less sensitive to gross errors than its normal theory counterpart, the differences between the sample averages.

Third and finally, we use an ordinary least squares model that regresses the computed change in crime rates across the 4-year period 1990–1991 and 1993–1994 on a dummy variable for midnight basketball and a set of demographic characteristics of cities ($X_i$) associated with crime rates:

$$\Delta \ln(\text{crimerate}_i) = \beta_0 + \beta_1 \text{MidnightBasketball} + \delta_i \ln X_i + e_i.$$ 

The list of demographic variables is compiled from the U.S. Census Bureau's 1994 City and County data book mentioned above and includes the percentage of the population that is age 18 to 24 years, the percentage that is African American, the ratio of men to women, level of police expenditures per capita, the unemployment rate, and a measure capturing the extent of occupied housing that is owned or rented. We provide central tendency and variability data for candidate demographic varia-
Findings

The Wilcoxon rank sum tests reported in Table 2 show that we can reject the hypothesis of no differences in the changes of violent crime rates and property crime rates between the two groups at the .05 significance level (see Table 2). This test suggests differences in the change in crime rates between cities with and without midnight basketball are unlikely to have occurred as a random event. In other words, cities that adopted midnight basketball programs experienced greater declines in crime rates than those cities that lacked midnight basketball leagues. This result holds for violent crime rates and property crime rates.

However, what is the magnitude of these effects? How significant are the differences in crime rate change between the two sets of cities? To estimate these values, we used the procedures described above and found in Hollander and Wolfe (1999). For violent crime rates, midnight basketball cities saw a drop of approximately 90 offenses per 100,000 compared to nonmidnight basketball counterparts. The 95% confidence interval for this estimate ranges between 70 and 270 violent crimes per 100,000 people. For property crime rates, midnight basketball cities saw a drop of 390 more offenses per 100,000 in midnight basketball cities, a result that allows us to estimate the 95% confidence interval at somewhere between 300 and 990 property offenses per 100,000 people.

Although these tests suggest an association between midnight basketball implementation and decreasing rates of crime, we wanted to explore how other factors may influence crime rate changes. To do this, we used the linear regression approach described above and discuss the results below.

Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Violent Crime Rates</th>
<th>Property Crime Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cities without midnight basketball programs (#)</td>
<td>171</td>
<td>171</td>
</tr>
<tr>
<td>Cities with midnight basketball programs (#)</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Wilcoxon rank sum test statistic (sum of the ranks for midnight basketball cities)</td>
<td>2,076</td>
<td>2,142</td>
</tr>
<tr>
<td>Expected value of sum of ranks under the null hypothesis of no differences in location</td>
<td>2,800</td>
<td>2,800</td>
</tr>
<tr>
<td>Standardized test statistic</td>
<td>−2.56</td>
<td>−2.33</td>
</tr>
<tr>
<td>p value</td>
<td>&lt; .01</td>
<td>&lt; .01</td>
</tr>
</tbody>
</table>

Note: a. The p value represents the smallest statistical significance level that the null hypothesis (no difference in change in crime rates) can be rejected. Hollander and Wolfe (1999) provide details on this procedure.
The regression results for the changes in violent crime rates (see Table 3, column 1) cast doubt about our initial finding regarding the association between midnight basketball programs and changes in violent crime rates. The standard errors for all coefficients in the model are large, so we cannot reject a null hypothesis that the coefficients in the model are 0 and have no practical significance. The regression explains little of the variation in these rates (e.g., adjusted $R^2$ were approximately 0); that is, it performs poorly as an explanatory model for changes in violent crime rates. These results seem to reinforce the notion that these programs are unlikely to significantly influence violent crime behavior or if they do, the influences are likely to be subtle and difficult to identify with this empirical method.

The regression results for property crime rates (Table 3, column 2) were far more interesting. In contrast to the results for violent crime rates, the implementation of midnight basketball programs appears to be associated with significant reductions in property crime rates in cities that adopted such programs—this, even after controlling for initial differences in demographic variables. First, the midnight basketball coefficient from the regression can be interpreted as the percentage difference in the predicted change in crime for cities with the program (100*(exp(-0.05))-1 = 5%). Therefore, a city’s drop in crime rate is 5% higher in cities with midnight basketball programs as compared to those without. We can also reject a null hypothesis that the coefficient for the midnight basketball dummy variable is 0 or very small at the .10 significance level. The coefficients for other explanatory variables are the estimated elasticities of the change in crime rates with respect to the variable. For example, the coefficient on percentage of youth implies that a 10% increase in the share of youth population in the initial conditions leads to .8% decline in the crime rate.

**Table 3**  

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Violent Crime</th>
<th>Property Crime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midnight basketball program</td>
<td>$-0.03 (0.043)$</td>
<td>$-0.05^* (0.027)$</td>
</tr>
<tr>
<td>Percentage youth</td>
<td>$-0.03 (0.075)$</td>
<td>$-0.08^* (0.047)$</td>
</tr>
<tr>
<td>Gender ratio</td>
<td>$-0.21 (0.261)$</td>
<td>$-0.41^* (0.164)$</td>
</tr>
<tr>
<td>Percentage Black</td>
<td>$0.01 (0.013)$</td>
<td>$0.01 (0.008)$</td>
</tr>
<tr>
<td>Police expenditures per person</td>
<td>$0.04 (0.048)$</td>
<td>$0.06^* (0.03)$</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>$-0.05 (0.043)$</td>
<td>$-0.06^* (0.027)$</td>
</tr>
<tr>
<td>Share of housing owner occupied</td>
<td>$0.04 (0.091)$</td>
<td>$0.06 (0.057)$</td>
</tr>
<tr>
<td>Constant</td>
<td>$0.99 (1.217)$</td>
<td>$1.2 (0.764)$</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.01</td>
<td>.087</td>
</tr>
<tr>
<td>Number of observations</td>
<td>198</td>
<td>198</td>
</tr>
</tbody>
</table>

*Significant at the .10 level.
Discussion

With the baseline data and analytic techniques employed here, we need to be careful not to overstate causal claims about the impacts of midnight basketball on community crime rates. The problems of spuriousness and simultaneity are of particular concern. On the latter front, for example, cities might adopt midnight basketball because of higher crime rates and midnight basketball programs might influence crime rates. As a result, the adoption of these programs and their impact on crime rates would be in some sense jointly determined. Unfortunately, we lack the data and measures to conduct definitive tests of these possibilities at this time. Nevertheless, we believe that the findings presented in this article are compelling and make a case that something significant with respect to crime prevention is associated with the implementation of midnight basketball programs.

Several possible explanatory mechanisms could account for this result. Let us first be clear that we do not believe that these effects can be attributed to individual-level mechanisms that are the emphasis of the theoretical literature on sports-based social interventions. Even adding in the possibility of “spillover” effects (where the interventionist techniques used on youth in the program are also conveyed through informal channels to friends and acquaintances who are similarly at risk but not in the program themselves) simply cannot account for the nature and magnitude of the findings presented here. Midnight basketball programs in the early 1990s were simply too limited in size, scope, and population served to account for these kinds of effects.

Two other sets of explanations are far more likely in our view. Both are indirect. One has to do with the packaging or bundling of crime prevention initiatives—more specifically, the likelihood that midnight basketball programs were not the only crime prevention initiatives undertaken in these communities but rather part of a whole package of risk-reduction and crime prevention programs of which midnight basketball was one high-profile component. In this case, the effects we observe are not the result of midnight basketball alone but rather of a whole package of crime prevention programs initiated in these communities. Cities that adopted midnight basketball programs tend to have distinct demographic and city-level spending profiles. As shown in the appendix, early adopter cities tended to be Blacker, have high police expenditures per capita, and have populations with low home ownership. These characteristics are not surprising considering that midnight basketball programs were conceived as crime prevention tools targeted at young urban men of color, were frequently adopted in cities that were examining low-cost alternatives to policing, and were championed as ways to increase social capital stocks in cities with indicators suggesting communities were less connected because of expected mobility (i.e., low shares of homeownership). Here, however, it is important to recognize that we need additional study and analysis of these treatment cities to determine more precisely whether these effects are the result of public policy reforms and innovations or more fundamental demographic shifts. In any case, this explanation
minimizes the direct effect to be certain but raises very interesting questions about the configuration of such prevention policy packages in general and the role sports-based initiatives in particular might play in such a policy climate.

A second explanation for these results involves media and communication mechanisms—what might be called, extending from Johnson and Bowers (2003), publicity effects. The idea here is that the public attention devoted to high-profile prevention programs like midnight basketball may have had its own independent impact on community crime rates. This could happen in one of two ways. On the deterrence side, public attention to midnight basketball programs might send a message to potential criminals of a new emphasis on crime prevention and the extent to which law enforcement and other public officials are willing to go in the fight against crime, thus creating a rational deterrent for would-be criminals. On the other hand, the creation of popular, high-profile programs like midnight basketball might send a more positive, proactive message to community members, one that puts a new emphasis on community outreach and builds trust, commitment, and solidarity.

The former is, of course, the more typical in the field of criminology and is frequently the subject of highly publicized debate (see, e.g., the case of conceal-and-carry gun laws; Donohue, 2003; Kovandzic & Marvell, 2003; Lott, 2000; Lott & Mustard, 1997). That said, we believe that the latter, less-developed account is the one more likely to be occurring with popular, voluntarist initiatives like midnight basketball. Community members would be less likely to commit crimes in the context of midnight basketball not for fear of being caught but because they want to participate in these programs, want them in their communities, and feel more directly connected to those around them and more positively served by law enforcement and social services because of them. The contrasting patterns we see for property crimes and violent crimes seem consistent with this explanation in the sense that midnight basketball may serve to help generate a wide and diffuse sense of community solidarity and trust that serves as a buffer against the individualistic and antisocial sentiments and behaviors that otherwise contribute to crimes against property and the community at large.

**Conclusion**

It is important to stress that the explanatory mechanisms we have just sketched are more theoretical than concrete, interpretively derived from social theory and existing literature in this area. The primary contribution of this article is empirical and cuts against a great deal of public and scholarly skepticism: namely, that midnight basketball is somehow associated with decreased city-level property crime rates. Obviously, a good deal more research must be conducted before we would want to argue that this relationship is stable and causal. Additional data and measures, along with more-sophisticated techniques employing fixed effects-estimators for cities, could potentially provide a more robust test of the effects of midnight basketball programs (see, e.g., Marvell & Moody, 1994). Nevertheless, we believe that these preliminary findings are strong enough to warrant subsequent data.
collection and analyses—not a proposition we would have been willing to endorse prior to undertaking the current study.

This research is important not only because of the intrigue surrounding midnight basketball but also because midnight basketball is an example of a whole class of sports- and recreation-based crime prevention programs that have been developed during the last couple of decades. These programs are not only popular and widespread but are also likely to receive renewed public and public policy attention in the coming months and years with the attention Republicans are currently devoting to after-school-based initiatives. The current study suggests that perhaps we should not be so quick to dismiss community-level effects of sports-based crime prevention programs such as midnight basketball that might appear, on the face of it, to be rather limited in scope and design. Moreover, our finding on property crime suggests that analysts would do well to focus on the intangible, indirect ways in which these results may be achieved. More specifically, these programs need to be implemented in combination with other risk-reduction initiatives and be attentive to the intangible, community-building effects that might come with the positive collective sentiments that they may help to generate and sustain. Certainly in a climate of limited resources requiring innovative, cost-effective solutions, these are possibilities that deserve a second look.

Appendix

City-Level Demographic Summary Statistics by City Group

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>City and County Data Book Code</th>
<th>Description</th>
<th>Cities Adopting Midnight Basketball $(n = 28)$</th>
<th>Cities Not Adopting Midnight Basketball $(n = 170)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage youth</td>
<td>Item 21 and Item 22</td>
<td>Percentage of population 18–24, 1990</td>
<td>12.9% (3.1)</td>
<td>12.2% (3.1)</td>
</tr>
<tr>
<td>Gender ratio</td>
<td>Item 30</td>
<td>Males per 100 females 1990</td>
<td>92.8% (5.7)</td>
<td>94.4% (5.6)</td>
</tr>
<tr>
<td>Percentage Black</td>
<td>Item 5 and Item 10</td>
<td>Population 1990 and population, Black 1990</td>
<td>32.9% (18.3)</td>
<td>15.8% (16.5)</td>
</tr>
<tr>
<td>Police expenditures per person</td>
<td>Item 180 and Item 184</td>
<td>City government Expenditures per capita, 1990–1991</td>
<td>$178 (47)</td>
<td>$130 (48)</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>Item 124</td>
<td>Civilian labor force unemployment rate, 1991</td>
<td>7.5% (2.3)</td>
<td>6.6% (2.4)</td>
</tr>
<tr>
<td>Share of housing owner occupied</td>
<td>Item 103</td>
<td>Percentage of housing owner occupied</td>
<td>44.2% (7.9)</td>
<td>54.8% (9.9)</td>
</tr>
</tbody>
</table>

Note: a. Test of differences between city groups using the Wilcoxon rank sum procedure is significant at the 0.05 level for these demographic variables.
Notes

1. For papers on the nature and extent of all parks and recreation programming that demonstrate the challenges of documentation here, see Crompton and Kaczynski (2003).
2. This background comes from Hartmann (2001); see also Carter (1998).
3. Such claims, as Witt and Crompton (1997) discussed, were and are common for sports- and recreation-based crime prevention initiatives. The Police Athletic League in Goodwin, Arizona, for example, claimed that juvenile arrests dropped 16.1%, and juveniles were 43.9% less likely to be victims. In Cincinnati, Ohio, a recreation-based program was said to have produced a 31% reduction in crime incidence. Officials in Fort Myers, Florida, attributed a 27% drop in crime to its STARS outreach program, while in Kansas City, Missouri, program claimed a 25% reduction in crime. Fort Worth, Texas, purported to experience a 28% drop within a 1-mile radius of the program site. All of these, as Witt and Crompton pointed out, are lacking in scientific comparisons and/or controls.
4. One city (Orlando, FL) was excluded because complete crime statistics for the analysis period were not available.
5. Although the t-test is probably most familiar to policy analysts who are interested in two sample location problems, we used the Wilcoxon rank sum procedure because the mild assumptions that this method requires about the underlying populations from which the data are obtained. Unlike its normal theory counterpart, the test does not assume the underlying populations are normal. As Hollander and Wolfe (1999) noted, these procedures are insensitive to outliers, are only slightly less efficient than the normal theory competitors if the underlying populations are normal, and can be significantly more efficient if the underlying populations are not normal (see p. 40).
6. For what it is worth, Levitt (1996) argued this type of problem is pervasive in empirical research of crime.

References


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