The Reality of Reality Television: Does Reality TV Influence Local Crime Rates?

1. Introduction

For the past decade, reality television has been on the rise with networks across the spectrum expanding their reality show programming (Levin, 2007). Reality television refers to a genre of television programs that depicts "real people in live situations". Networks such as MTV and Bravo have devoted an overwhelming share of their television lineups to reality shows. For example, in 2008, MTV launched 16 new reality-based shows.

abuse and that the show would make students more susceptible to school shootings (Baker, 2006; Steinhauer, 2006).

Perceptions about the link between reality television and crime are also fueled by stories of reality stars being exposed to crime. In 2008, an estimated \$7 million in jewelry was taken from the home of boxing champion, Floyd Mayweather, Jr. almost a year after he flaunted his home and jewels on the popular MTV show "Cribs," which features tours of celebrity homes. In 2009, reality television stars such as Audrina Patridge from the MTV show "The Hills," Jon Gosselin from The Learning Channel's popular show "Jon and Kate Plus 8," and Kourtney Kardashian from the E Network's "Keeping Up With the Kardashians" all experienced residential burglaries. Concern about the link between reality television and crime is also evident in a letter from the New Jersey Italian American Legislative Caucus to the CEO of Viacom. In the letter, the caucus stated that MTV's popular show "Jersey Shores" was "an offensive, inaccurate portrayal of Italian Americans and contrary to New Jersey's efforts to reduce hate and bias-related crime" (Itzkoff, 2009).

As reality-based shows continue to be more successful than sitcoms or dramas and as networks seek to make reality programming a permanent part of their television lineups, it will be important to analyze the impact that these shows have on the cast members and the communities in which they are filmed. Given the high profile of "Laguna Beach" and the show's ability to raise the profile of a city overnight, Laguna Beach serves as a good case study to estimate changes in local crime rates after the debut of a reality television show.

"Laguna Beach: The Real Orange County" debuted on September 28, 2004. The show aired for three seasons with 43 episodes. During its second season, the show drew a record of 4 million viewers a week (Gordon, 2005). Cast members became celebrities overnight, hiring

publicists and pursuing careers in acting and fashion (Smith, 2005). Shopkeepers reported being swamped with tourists attempting to track down the cast members. In addition, the Laguna Beach Tourist Bureau offered a self-guided tour of the show's locales (Smith, 2005).

We estimate changes in the city's crimes per capita after the debut of the MTV-based reality show "Laguna Beach" using a difference-in-differences approach. Given the demographic and geographic similarities between Laguna Beach and its neighboring city Dana Point, we use Dana Point as a control to account for trends in

adjustments for offenses that were reported to law enforcement in prior months, but were later determined to be unfounded.²

Annual data on city populations and the number of law enforcement officers were extracted from the FBI Uniform Crime Reports. The reports include the number of officers for Laguna Beach, and we obtained data from the

Figure 1 graphs the total number of reported crimes at the quarterly-level in both cities during our sample period. The figure suggests that the divergence in crime rates between the two cities was more pronounced and consistent following the debut of the show in the fall of 2004. As a specification check, we perform a falsification test to check for a pre-existing trend in crime between the two cities, and we do not find evidence of a pre-existing trend in crimes exist for Laguna Beach relative to Dana Point.⁴

To more formally investigate whether differences in crime rates are statistically significant, we run the following OLS regression for the number of crimes per capita in city i during month t:

 y_{it} post, laguna, post, laguna, $X_{it}\beta$ ε_{it}

Our coefficient of interest is 3, which represents the difference in crimes per capita between Laguna Beach and Dana Point after the show aired. Equation (1) assumes that the characteristics of Laguna Beach and Dana Point are similar over the two time periods. However, if the characteristics of one city changed relative to the other over the two time periods, then our coefficient of interest may not fully capture the effect of the show.

Table 2 reports coefficients from our OLS regressions for the nine crime categories. The results suggest that after the reality show debuted, an additional 0.09 non-residential burglaries and an additional 0.08 auto thefts per 1,000 people occurred each month. Given that the population of Laguna Beach is approximately 24,000, this corresponds to an additional 2 non-residential burglaries and 2 auto thefts each month. Some evidence exists that after the airing of the reality show there was an increase in the monthly number of rapes by 0.013 per 1,000 residents; this result is statistically significant at the 10-percent level. There does not appear to be a statistically significant impact on the other crime categories. While the reality show is one

We find suggestive evidence that non-residential burglaries, auto thefts, and rapes increased during the period following the show's debut. Given that the show also raised the profile of the local merchants that were highlighted in various episodes, it may not be surprising that we observe an increase in non-residential burglaries. We find no evidence that residential burglaries or robberies increased in the period after the show's debut. One explanation for why we do not observe higher rates of residential crimes may be the result of the numerous gated communities in Laguna Beach that create highly guarded residential areas. It should also be noted, that our results are based on the assumption that Dana Point is a suitable control group and that the demographics of the two cities remained the same over the two time periods.

The increased profile of a city can bring many positive benefits to a community, such as a rise in tourism and local business. However, depending upon the lifestyle portrayed by the residents, the community may draw negative consequences, such as an increase in crime. As more reality-based shows are created, the community needs to carefully weigh the costs and benefits of their increased profile.

Acknowledgements

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⁵ Due to prohibition of filming at the campus of Laguna Beach High School, TV producers focused on local "hot spots" and businesses in the area, such as Ruby's Diner, Surf and Sport, and Fashion Island (Paulsen, 2004). In fact, Laguna Surf And Sport has reported an increase in calls and traffic from tourists and the general public after the show aired, inquiring about one of its former employees who was a prominent cast member of the show (Riley, 2005).

References

Baker, C., 2006. Drug, Alcohol Use is High. Laguna Beach Coastline Pilot, November 9.

Brown, P. H., Minty, J. H., 2008. Media Coverage and Charitable Giving after the 2004 Tsunami. South. Econ. J., 75, 9-25.

Card, D., Dahl, G., 2007. Family Violence and Football: The Effects of Unexpected Emotional cues on Violent Behavior. NBER Working Paper No. 15497.

Dahl, G., Della Vigna, S., 2008. Does Movie Violence Increase Violent Crime? NBER Working Paper No. 13718.

Gentzkow, M., Shapiro, J., 2008, Preschool Television Viewing and Adolescent Test Scores: Historical Evidence from the Coleman Study, Q. J. of Econ., 123.

Gordon, D., 2005. Swimming with sharks; Deconstructing MTV's teen phenom Laguna Beach. Newsweek, September 26.

Healy, M., 2004. Plastic surgery, as seen on TV; Dramatic makeovers, seemingly simple and pain free are luring patients in droves. Los Angeles Times, April 12.

Itzkoff, D., 2009. New Jersey Lawmakers Object to Jersey Shore. New York Times, December 25.

Kelly, D., 2006. Laguna cast as the villain in Laguna; Annoyed at how MTV portrays their city, some parents say they fear for their children's safety. Los Angeles Times, November 12.

Levin, G., 2008. Simple Economics: More Reality TV. USA Today, May 9.

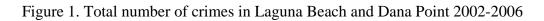
Ostensen, D., 2006. MTV Spoils Image of Laguna. Laguna Beach Coastline Pilot, August 2.

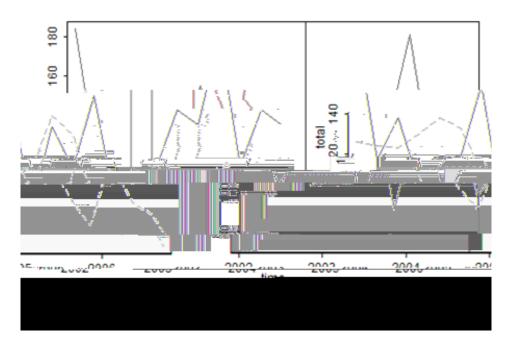
Paulsen, W., 2004. MTV's 'Laguna Beach: The Real Orange County' "reality soap" launching Tuesday. Reality TV World, September 28.

Riley, M., 2005. Laguna Beach Reality Show Cases Headaches for Local Surf Shop Laguna Surf and Sport. Surfing Magazine, September 1.

Smith, L., 2005. There's Laguna, and then there's MTV's Laguna. Los Angeles Times, November 5.

Steinhauer, J., 2006. Real OC Starts Objecting to its MTV portrayal. New York Times, November 8.





Notes: This figure graphs the total number of crimes repo

Table 1. Summary Statistics

	Laguna Beach		Dana P	oint	
	Pre	Post	Pre	Post	<u>-</u>
Demographic Characteristics					-
Population	23,727	23,578	35,110	32,018	-
Median Age	43.4	47.7	39.8	44.9	
Percentage White	92	90.7	87.2	85.8	
Population 25 and over with Bachelor's degree or higher	56.1	59.6	41	45.1	
Median household income (2007 dollars)	\$94,347	\$90,007	\$78,460	\$81,665	
Families below the poverty line	2.8	3.6	3.4	4.9	
Crime and Police					-
Residential burglaries	0.314	0.239	0.168	0.149	
Non-residential burglaries	0.195	0.246	0.109	0.074	
Residential robberies	0.001	0.003	0.002	0.003	
Non-residential robberies	0.015	0.022	0.028	0.021	
Rapes	0.010	0.022	0.009	0.009	
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Table 2. Crime rates in Laguna Beach (relative to Dana Point) after the debut of the TV show

(3)

(4)

(5)

(6)

(7)

(2)

(1)