## **Broken Window Effect**

Joël J. van der Weele<sup>1</sup>, Mataka P. Flynn<sup>2</sup> and Rogier J. van der Wolk<sup>2,3</sup> <sup>1</sup>Department of Economics, University of Amsterdam, Amsterdam, Netherlands <sup>2</sup>Faculty of Law, Vrije Universiteit Amsterdam, Amsterdam, Netherlands <sup>3</sup>Faculty of Law, Universiteit van Amsterdam, Amsterdam, Netherlands

### Abstract

The broken windows effect refers to the hypothesis that there is a positive effect of urban disorder on the incidence of more serious crimes, where the term "broken windows" represents a range of disorders within communities. The hypothesis has been the subject of an intensive academic debate and has had an important effect on law enforcement in the USA, where it increased the focus on community policing and zero tolerance. This essay reviews the evidence for the existence of the broken windows effect and the effectiveness of the associated policing strategies.

### Introduction

James Wilson and George Kelling coined the term "broken windows effect" (BWE) in a magazine article in 1982. They argued that broken windows,

DOI 10.1007/978-1-4614-7883-6\_624-1

a catch-all term for disorder and incivility within a community like graffiti, vandalism, littering, etc., can lead to further disorder and increases in criminal behaviour. Their argument originated in experiences with Newark police practices and also referenced an "experiment" by Stanford psychologist Zimbardo (1973), who abandoned cars in different neighborhoods and in various states of disrepair to study their subsequent vandalization.

Kelling and Wilson (1982) asserted that broken windows send a signal of indifference and lack of enforcement, leading to increased fear of crime and weakening of social controls, thus paving the way for bigger transgressions. To prevent such processes, the authors argued that it is crucial for the police to engage in the prevention and policing of disorder and minor crimes like panhandling.

The BWE had a substantial influence on the practice of law enforcement in several major US cities, inducing a shift to disorder policing and "zero tolerance". Specifically, in 1993, under the guidance of Police Commissioner William Bratton and Mayor Rudolph W. Giuliani, New York City (NYC) implemented an enforcement strategy designed to "reclaim the public spaces of New York" (Bratton and Knobler 1998, p. 228). This led to a more than 50% increase in arrests for misdemeanors, without a substantial increase in reporting of misdemeanors (Harcourt 1998).

These police initiatives coincided with a large drop in crime in NYC, sparking a vigorous debate involving both academics and practitioners (Eck

<sup>©</sup> Springer Science+Business Media LLC 2017

A. Marciano, G.B. Ramello (eds.), Encyclopedia of Law and Economics,

and Maguire 2000). Proponents of the BWE argue that the initiatives like those in NYC described above were at least partly responsible for drop in crime (Kelling and Bratton 1998). Critics, however, emphasize rival explanations like the decline in the crack epidemic and argue that crime was decreasing in NYC prior to the implementation of novel policing strategies and decreased in other large cities without aggressive policing strategies (Harcourt 1998; Fagan et al. 1998).

# Evidence

The existence of a BWE is an empirical question. In what follows, we will discuss some of the most influential contributions to the empirical debate and provide some thoughts about directions for future research.

To test the broken windows hypothesis, a number of studies have tried to establish a correlation between disorder, possibly as a consequence of variation in police strategy, and more severe crimes like robberies or violent crimes. Many studies focus on the New York 1993 crime initiative and use variations in misdemeanor arrests across precincts or boroughs as a measure of disorder. Different studies vary in the length of those time-series and the control variables used.

For instance, Kelling and Sousa (2001) use variations across NYC precincts over time with regard to both misdemeanor arrests and crime rates and demonstrate a statistically significant and substantial negative relationship between both. This result is echoed by Corman and Mocan (2005), who analyze a dataset of monthly time series citywide and control for policing variables such as felony arrests and the size of the police force.

Other studies have found smaller or no correlations between disorder and crime. For instance, Sampson and Raudenbush (1999) employed trained observers to drive through all streets throughout 196 census tracts in Chicago. They selected 15,141 street sides, which were then videotaped and coded for neighborhood disorder. The authors found that the correlations between the documented disorder and most predatory crime rates disappeared when controlling for structural neighborhood conditions like poverty.

Apart from yielding conflicting results, the correlational studies cited above (and similar ones like it) are susceptible to confounding explanations. For example, Harcourt and Ludwig (2006) attempt to replicate the findings by Kelling and Sousa (2001) and Corman and Mocan (2005) and find that the patterns are also consistent with mean reversion. That is, high spikes in crime are followed by crime drops regardless of disorder policing. Alternatively, like Sampson and Raudenbush (1999) point out, both disorder and crime may depend on unobserved neighborhood characteristics, resulting in spurious correlations.

To overcome such problems, an increasing number of studies investigate the impact of experimental or random variation in disorder policing strategies. This makes it possible to exclude the confounds mentioned above and make causal statements about the effect of policing disorder on crime. For instance, Braga et al. (1999) conducted a randomized control trial, focussing on problem-oriented policing strategy to control physical and social disorder. The strategy resulted in a significant reduction in crime incidents in hotspots for violent crime, without much evidence for displacement to nearby locations.

Harcourt and Ludwig (2006) used data from an experiment carried out by the US Department of Housing and Urban Development known as Moving to Opportunity (MTO). Officials assigned around 4,600 low-income families from communities largely consisting of public housing and characterized by high rates of crime and social disorder to housing in more reputable and highstatus neighborhoods (Orr et al. 2003). Assignment to the program was random, allowing identification of the impact of disorder in the new neighborhood on the relocated individuals' criminal activity, without confounding effects of individuals' background. Harcourt and Ludwig (2006) compared the crime rates of those that moved and those that stayed in their lesser neighborhood and found that the rate of neighborhood order or disorder has no noticeable effect on criminal behavior.

Braga et al. (2015) provide a meta-analysis of 30 (quasi) experimental studies for a range of different disorder policing strategies. The authors conclude that aggressive zero-tolerance strategies against individuals do not produce significant effects on crime; however, approaches that involve the community to solve problems at particular locations tend to be quite effective. This is in line with the conclusions of an earlier review by Weisburd and Eck (2004). It also reinforces the findings of Taylor (2001), who used longitudinal data from 66 neighborhoods in Baltimore to determine the relationship between disorder and crime. On the basis of those results, Taylor argues that different types of disorder might require different policies and cautions against simple-minded crackdowns that undermine the social fabric of communities.

The differential effect of various policing strategies point to another empirical concern, namely, the identification of the different channels through which disorder can affect crime. Kelling and Wilson (1982) maintained that the effects of disorder manifest themselves through an increased fear of crime associated with neighborhood disorder. In turn, this leads to reduced social controls as people move away and are less inclined to engage in crime prevention or intervention. This sequence of events contrasts with more traditional explanations of incapacitation and deterrence associated with increased police arrests, presence contact, and surveillance.

Following this logic, Weisburd et al. (2015) argue that to test the BWE, it is not enough to look at the effect of disorder policing on crime rates without taking into account the effects on fear or crime perceptions. To do so, the authors identify six studies which allow the identification of such effects. In a meta-analysis of these studies, they do not find consistent evidence that disorder policing reduces fear of crime. Moreover, the effect sizes differ starkly across studies, and confidence intervals around the estimated effects are large, implying a need for more evidence.

### Conclusion

The original formulation of the BWE by Kelling and Wilson has resulted in several decades of lively debate on the proper role of police in society and has provided a big stimulus for empirical research on community policing. Although the evidence for the BWE seems underwhelming at present, it is hard to draw firm conclusions, as much of the available research is not well suited for the identification of causal patterns, or to distinguish between the BWE and more traditional theories.

To move the discussion forward, research designs should focus on the use of random variation in policing strategies. Moreover, a better understanding of the links between disorder and crime requires investigation of the specific social mechanisms under consideration. This implies a need to formulate detailed theories from which one can derive testable hypotheses. The set of outcome variables will have to go beyond crime reports and arrest rates to include perceptions of safety, trust, willingness to intervene, and other variables related to community enforcement (Sampson et al. 1997). These studies will require careful coordination between academics and police forces. Whether the BWE turns out to be real or not, this approach will allow the evidencebased policing that makes society safer.

## **Cross-References**

- Causation
- ► Cost of Crime
- Crime (Economics of)
- ▶ Crime (Expressive) and the Law
- ► Crime (Incentive to)
- Criminal Sanction and Deterrence
- Empirical Analysis
- Monitoring
- Prosocial Behaviors
- Public Enforcement
- Social Norms

## References

- Braga A et al (1999) Problem-oriented policing in violent crime places: a randomized controlled experiment. Criminology 37(3):541–580
- Braga A, Welsh B, Schnell C (2015) Can policing disorder reduce crime? A systematic review and meta-analysis. J Res Crime Delinq 52(4):567–588
- Bratton W, Knobler P (1998) Turnaround: how America's top cop reversed the crime epidemic. Random House, New York
- Corman H, Mocan N (2005) Carrots, sticks and broken windows. J Law Econ 48:251
- Eck J, Maguire E (2000) Have changes in policing reduced violent crime? An assessment of the evidence. In: Blumstein A, Wallman J (eds) The crime drop in America, rev. edn. Cambridge University Press, New York, pp 207–265
- Fagan J, Zimring F, Kim J (1998) Declining homicide in New York City: a tale of two trends. J Crim Law Criminol 88(4):1277–1324
- Harcourt B (1998) Reflecting on the subject: a critique of the social influence conception of deterrence, the broken windows theory, and order-maintenance policing New York style. Mich Law Rev 97(2):291–389
- Harcourt B, Ludwig J (2006) Broken windows: new evidence from New York City and a five-city social experiment. Univ Chic Law Rev 73:271–320
- Kelling G, Bratton W (1998) Declining crime rates: insiders' views of the New York city story. J Crim Law Criminol 88(4):1217–1232

- Kelling G, Sousa W (2001) Do police matter?: an analysis of the impact of New York city's police reforms. Civic report no. 22. Manhattan Institute, New York
- Kelling G, Wilson Q (1982) Broken windows. Atl Mon 127(2). http://www.theatlantic.com/magazine/archive/ 1982/03/broken-windows/304465/
- Orr L et al (2003) Moving to opportunity: interim impacts evaluation. U.S Department of Ousing and Urban Development Office of Policy Developments and Research report. http://www.abtassociates.com/ reports/2003302754569 71451.pdf
- Sampson R, Raudenbush S (1999) Systematic social observation of public spaces: a new look at disorder in urban neighborhoods. Am J Sociol 105(3):303–651
- Sampson R, Raudenbush S, Earls F (1997) Neighborhoods and violent crime: a multilevel study of collective efficacy. Science 277:918–924
- Taylor R (2001) Breaking away from broken windows: Baltimore neighborhoods and the Nationwide fight against crime, guns, fear and decline. Westview, Boulder
- Weisburd D, Eck J (2004) What can police do to reduce crime, disorder, and fear? Ann Am Acad Pol Soc Sci 593(1):42–65
- Weisburd D et al (2015) Understanding the mechanisms underlying broken windows policing: the need for evaluation evidence. J Res Crime Delinq 52(4):589–608
- Zimbardo P (1973) A field experiment in Autoshaping. In: Ward C (ed) Vandalism. Architectural Press, London, pp 85–90