



More structural holes, more risk? Network structure and risk perception among marijuana growers



Aili Malm^{a,*}, Martin Bouchard^b, Tom Decorte^c, Marieke Vlaemynck^c, Marije Wouters^d

^a California State University, Long Beach, 1250 Bellflower Blvd, Long Beach, CA, 90840, USA

^b Simon Fraser University, 8888 University Drive, Burnaby, BC, V5A 1S6, Canada

^c University of Gent, St. Pietersnieuwstraat 33, 9000 Gent, Belgium

^d University of Amsterdam, PO Box 1030, 1012 CP, the Netherlands

ARTICLE INFO

Article history:

Received 8 June 2016

Received in revised form

22 December 2016

Accepted 8 January 2017

Available online 1 March 2017

Keywords:

Marijuana

Cannabis cultivation

Perceptual deterrence

Risks of apprehension

Structural holes

Network closure

Vicarious deterrence

ABSTRACT

This study examines the relationship between network structure and risk perceptions. We use self-report data on 359 illicit marijuana growers and their personal co-worker networks. Our results show that growers with more structural holes in their co-worker network perceive higher risk of apprehension from law enforcement. We argue that this result is facilitated by two mechanisms: 1) the amount and quality of information available to growers about risks and detection, which uses guidance from Stafford and Warr's (1993) concept of vicarious deterrence; and, 2) the trust inherent in their network and the growers' self-awareness of their own network position, which relies on Coleman's (1988) and Burt's (2005) ideas of network closure as a protective factor.

© 2017 Elsevier B.V. All rights reserved.

Introduction

According to deterrence theory, people rationally choose to commit crime by deliberately weighing costs and benefits. Since the inception of the theory, many scholars have argued that the power of deterrence lies in the individual's perception of the certainty, severity, and celerity of punishment (Andenaes, 1974; Geerken and Gove, 1975; Gibbs, 1975; Waldo and Chiricos, 1972; Zimring and Hawkins, 1973). Nagin (1998) summarized this body of survey-based perceptual deterrence studies and concluded that criminality is lower among those who perceive a higher likelihood of apprehension. Thus, it can be said that an inherent part of deterrence theory is perceptual (Paternoster et al., 1983).

While criminological researchers agree that *perceived risk of apprehension* is an important construct to consider when constructing public policy based on deterrence and the threat of legal sanctions, they have been relatively unsuccessful in isolating its correlates and explaining individual variance (Piquero et al., 2012). Variables traditionally considered when examining

perceived risk of apprehension include legal sanctions (general deterrence), direct experience with law enforcement (specific deterrence), and offender demographics (Gibbs, 1975). It was not until 1993, when Stafford and Warr reconceptualized traditional deterrence theory, that one's social network was thought to impact risk perception.

Criminological theory is rife with images of social network influence over criminal behavior; concepts like "social bonding, cohesion and control, opportunity structures, diffusion, trust, and peer influence" all convey the importance of an individual's network on their decision to commit crimes (Papachristos, 2011: 102–102). Deterrence theory was absent this influence until Stafford and Warr integrated deterrence doctrine and social learning theory to form their concept of vicarious deterrence (1993). Vicarious deterrence occurs when an individual bases their judgment about the certainty of legal sanctions on others' punishment or avoidance of punishment for a crime, and on the amount of knowledge one has of their network's criminal activity (Paternoster and Piquero, 1995; Stafford and Warr, 1993).

Qualitative research has provided some guidance in understanding how offenders share information. For example, Patricia Adler (1993) interviewed drug dealers in the US Southwest. She found that dealers use networks of friends and acquaintances to

* Corresponding author.

E-mail address: ailli.malm@csulb.edu (A. Malm).

build their business. In reference to vicarious deterrence, these networks share information about perceived risks from police and other dealers. Mohamed and Fritsvold (2010) found similar results, explaining how networks of dealers share information about formal and informal threats. Jacques and Wright (2015) show that communication fueling drug markets operates like a contagion through electronic and in-person interactions. These messages flow through the market from producers, to traffickers, to consumers, and back again.

Research testing the explanatory power of vicarious deterrence has found mixed results. A key explanation for such contradictory results is the difficulty operationalizing vicarious deterrence. Quantitative studies have struggled in translating qualitative results into valid measures. Studies contradicting Stafford and Warr used data obtained by surveying student populations using hypothetical scenarios (Piquero and Paternoster, 1998; Piquero and Pogarsky, 2002; Sitren and Applegate, 2006, 2012) rather than from self-reports of actual criminal activity. The only study to unequivocally support Stafford and Warr's assertions regarding vicarious deterrence and perceived risk used data from self-reports and operationalized vicarious deterrence as overall knowledge of peers' criminal activity (Paternoster and Piquero, 1995). In addition, previous research has treated individuals independently, instead of being embedded in an interdependent social network; no structural measures of an offender's network have been examined as possible proxies for vicarious deterrence. This omission should be addressed in order to better understand how the structure of one's social network affects an individual's sense of security and perception of risk.

This study fills a gap in the research in three ways. First, we take a new approach to operationalizing vicarious deterrence by using social network variables designed to measure access to information and security and assess their effect on an individual's perception of risk. Second, instead of using student samples, we test vicarious deterrence and risk perceptions using a study population of recently or currently active marijuana growers. Third, we move beyond hypothetical scenarios of criminal experiences and use a self-report survey designed to capture the offender's risk perceptions and personal co-worker network. Addressing these gaps should help clarify the relationship between vicarious deterrence, network structure, and risk perceptions.

Stafford and Warr's vicarious deterrence

Empirical support for the effect of vicarious deterrence on perceived certainty of punishment is mixed, at best. Paternoster and Piquero (1995) tested and expanded Stafford and Warr's (1993) original reconceptualization of deterrence theory by studying how knowledge of peers' criminal activity (illicit substance use), which acts as an indirect operationalization of vicarious punishment/avoidance, affects an adolescent's perceived certainty of apprehension for drinking and marijuana use. They found a positive relationship between these two variables, which supports Stafford and Warr's theory. Piquero and Paternoster (1998) extended this line of inquiry exploring how friends' license suspension or jail time (vicarious punishment), and an estimation of how likely those convicted of drunk driving get the prescribed punishment (vicarious punishment avoidance), effects the respondent's likelihood of drunk driving. Contrary to Stafford and Warr's theorizing, they found vicarious punishment increased criminal intentions and vicarious punishment avoidance decreased criminal intentions. Piquero and Pogarsky (2002) and Sitren and Applegate (2006) studied the effects of friends' arrest (vicarious punishment) and percentage of peers who had driven drunk without detection (vicarious punishment avoidance) on intentions to drive after drinking. Both studies found that vicarious punishment avoidance

decreased perceptions of risk, supporting the theory; but vicarious punishment also decreased perceptions of risk, contradicting Stafford and Warr. Replicating this research but extending to an offender population, Sitren and Applegate (2012) surveyed inmates using the same methodology as Piquero and Pogarsky (2002). Their results once again contradicted the theory, showing that vicarious punishment was associated with a lower perceived risk of apprehension.

The contradictory nature of this research leads us to consider other factors that impact how an individual both learns about and interprets risk. We contend that an offender's perception of risk depends upon the interplay between two mechanisms: 1) the amount of information an individual has on their social network's experience with the efficiency or inefficiency of law enforcement (Paternoster and Piquero, 1995), and 2) trust in one's social network. The first mechanism is guided by vicarious deterrence, while the second mechanism is rooted in ideas on network closure and structural holes (Burt, 2005; Coleman, 1988).

Network structure and risk perception

In 1988, Coleman introduced the network closure argument which states that network density can increase social capital by doing two important things: 1) it increases access to accurate information by reducing the number of intermediaries through which communication must pass; and 2) it increases trusts in one's network by enforcing group norms and cooperation. The latter advantage built upon Granovetter's (1981) argument that in situations where individuals face the threat of sanctions, trust is more likely between people who have mutual friends. In 1992, Ron Burt challenged the network closure argument, stating that social capital is created when an individual is able to broker between otherwise disconnected people. He used the term *structural hole* to describe the lack of connection between actors in a network. However, he later acknowledges that the two perspectives actually apply to different problems – dense networks are more adaptable for situations needing collective action and trust, and individuals brokering over structural holes are better able to gain access to specialized groups/knowledge and increase profit. Brass et al., (1998) elaborated on the trust generated through network closure, proposing that every structural hole in a network presents an opportunity for unethical behavior.

What unites this body of work is the protective features that closed networks have for individuals embedded within them. Lin (2001) conceptualized this idea as the expressive returns of social capital. Expressive returns of social capital have been measured mainly through trust, support (Son and Lin, 2008), social control in the form of discouraging malfeasance (e.g., Colvin et al., 2002; Wright and Fitzpatrick, 2006), but also in avoiding detection in a sample of young offenders (Bouchard and Nguyen, 2010). Much like Burt, Lin (1999) argues that closed networks with homophilous ties (contacts with similar characteristics and resources) reinforce the preservation of resources because it increases solidarity and trust whereas extended networks with heterophilous interactions (contacts with dissimilar characteristics and resources) are more likely to aid in the acquisition of resources (Burt, 1992; Coleman, 1988; Granovetter, 1981; Lin, 1999, 2001).

Interestingly, criminologists working with social network analysis have conflicting views on the benefits of closure in criminal networks. These researchers suggest that criminal networks have to balance the need for efficient business connections and communication with security and secrecy due to the inherently hostile environment in which criminals operate, where the criminal justice system works to inhibit individuals profiting from criminal enterprise (Baker and Faulkner, 1993; Morselli et al., 2007). This

Download English Version:

<https://daneshyari.com/en/article/5126762>

Download Persian Version:

<https://daneshyari.com/article/5126762>

[Daneshyari.com](https://daneshyari.com)