MIA-MARIA MAGNUSSON

OPEN DRUG SCENES & THE MERGING OF POLICING PRACTICE AND RESEARCH

A pracademic approach

**OPEN DRUG SCENES &
THE MERGING OF POLICING PRACTICE AND RESEARCH
-A PRACADEMIC APPROACH**

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Malmö University, 2022
Faculty of Health and Society
Department of Criminology
Swedish Police, Stockholm Region

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To Doris & Margo

Table of Contents

ABSTRACT	9
LIST OF PUBLICATIONS	11
INTRODUCTION	13
The police and research	13
Evidence-based policing	14
Pracademic research approach	16
Policing drug crime	17
Open Drug Scenes	18
The Swedish context	19
THIS THESIS	25
Aims	25
THEORY AND EXISTING RESEARCH	27
Theoretical framework	27
Theory of social disorganization	27
Routine activity theory	28
Situational action theory	29
Geography, geometry, and ecology	30
Existing research	32
Geographic micro places and crime concentration	32
METHODS	37
Research approach	37
Targeting drug markets	38
Testing a police tactic	40
Translating to bridge the research-practice gap	41
Data	42
New data	42
Data	42
Ethical considerations	43

MAIN RESULTS	45
Analysis	52
Implementation of results in practice.....	54
EBP of ODSs and how to get there.....	57
Pracademic impact on research.....	59
DISCUSSION AND FUTURE DIRECTIONS	61
Pracademic merging	61
Merging the pace of research and police operations	62
The pracademic reach	63
ODS context	65
Violent micro-culture.....	66
Pracademic Translation into action	69
Translation into improved targeting.....	69
Translation into Testing and tracking of Hot spots policing	71
Translation into improved principles of policing	73
Limitations	75
Data and methods	75
Pracademic challenges	77
CONCLUSION	81
Triple T raised to the power of T	81
POPULÄRVETENSKAPLIG SAMMANFATTNING	83
ACKNOWLEDGEMENTS	87
REFERENCES	89

ABSTRACT

Policing research has had an upswing as the evidence-based policing movement has grown stronger and entered police practises worldwide. Within the evidence-based policing (EBP) approach, practically and academically skilled individuals, pracademics, have attracted attention as facilitating the merging of policing practice and research. Using principles from EBP, and with a special focus on translating between policing practice, policy and research, this thesis aims to explore the characteristics of illicit drug markets with a place-based focus and to link this to the enhancement of EBP in Sweden. The theoretical base of the thesis is drawn from disorganization theory, routine activity theory and situational action theory, and these theories are combined with empirical studies from the research field of drug markets. Drug markets are defined as open drug scenes (ODSs) in this pracademic thesis, which includes two empirical studies of patterns that characterize ODSs, one randomized controlled trial (RCT) of a law enforcement tactic at an ODS, and one case study of the impact of the pracademic research approach. The findings show that there are almost 50 ODSs in Stockholm County, which are characterized by patterns of crime concentration, a gun violence overlap, and associations with perceptions of unsafety. Three types of ODSs were identified, providing a basis for the tailoring of future interventions based on area characteristics, ODS stability, levels of violence, and gang activity. Micro places associated with ODSs and gun violence were found to be characterized by harsh social conditions and high levels of crime. A predictive index was created to forecast micro places at which gun violence may occur, and the prediction was enhanced when ODSs were included as predictive locations. The RCT, which was completed at a well-known ODS in the inner city of Stockholm, showed a slight but non-significant effect of the police conducting motivational talks with offenders, which gave rise to questions regarding the method's effectiveness. The case study

of the RCT process found frustration in police departments to be a possible door-opener for research. Ease of implementation was associated with the research having credibility among police officers, which was achieved by including the needs of practice in research questions and through the role played by the pracademic researcher. This thesis argues for making use of pracademics to bridge the research-practice gap, a focus on ODSs, and the testing and tracking of methods such as hot spots policing, with an emphasis on properly implemented evidence-based methods and on the goals of enforcement strategies as a means of improving the effectiveness of drug-market policing.

LIST OF PUBLICATIONS

This thesis is based on the following four studies. These studies will be referred to in the text by their Roman numerals:

- I. Magnusson, M. M. (2020). Mapping open drug scenes (ODS). In Cecato, V., & Nalla, M. K. (Eds.), *Crime and fear in public places: Towards safe, inclusive and sustainable cities* (pp. 305-325). London & New York: Routledge.
- II. Magnusson, M. M. (submitted). Open drug scene - gun violence overlap and prediction of gun violence at micro places in Stockholm.
- III. Magnusson, M. M. (submitted). Preventing relapse into drug crime through motivational talks at a drug scene in Stockholm: A randomized controlled trial of a law enforcement tactic.
- IV. Magnusson, M. M. (2020). Bridging the gaps by including the police officer perspective? A study of the design and implementation of an RCT in police practice and the impact of pracademic knowledge. *Policing: A Journal of Policy and Practice*, 14(2), 438-455.

INTRODUCTION

The police and research

The police profession has historically been viewed as a craft (Skolnick, 1994), with decisions and policies being based on legislation and experience. In many countries, police training has been located at specific police academies, which are separate from other educational institutions. The organization of the police has from the beginning involved a hierarchal establishment, with clear levels of command and power (King, 2005). In the hierarchal structure of the police, policing legislation and guidelines have constituted the core of practice. Enforcement has rested on practical skills, gut feelings and on learning from senior officers and strong traditions. In recent years, however, this has begun to change. Many police forces around the world have begun a journey towards the inclusion of research in training, policy, and practice. The drive has come from questions raised with regard to procedural justice and the effectiveness of policing (Perez & Shtull, 2002). The development of the police profession now includes staying abreast of the growth of research on policing, and making use of evidence on best practice (Sherman, 1998; Neyroud & Weisburd, 2014; Lum & Koper, 2017), while at the same time maintaining and refining competence and the quality of those processes that are effective (Willis & Mastrofski, 2018).

Policing research has taken many forms and directions since its start in the US in the 1950s and the UK in the 1960s, and according to Reiner (2010) has passed through five stages: *consensus*, where the police were supported by research, *controversy* where policing was criticized, *conflict* where policing became subject to accountability, a *contradictory* phase, in which the emphasis was directed at the effectiveness of police, policy improvement and possible innovation, and finally a *crime control* phase, with research focusing on intelligence-led policing and in

depth crime-analysis. The research has shifted in line with political developments and theoretical development in other research fields (Reiner, 2010; Gravelle & Rogers, 2014). The explosive development in the field of innovative technologies such as crime mapping, body cameras, and CCTV, are also playing a major role in the growth of policing research, enabling more areas of policing to be researched.

There has been an evident gap between research and practice within police research, with research results remaining unused due to a lack of relevance for practice (Bayley, 1998), the skepticism of the police organization towards research (Neyroud & Weisburd, 2014; Huey & Mitchell, 2016; Lum, Telep, Koper & Grieco, 2012; Brante, Johnsson, Olofsson & Svensson, 2015), and the lack of engagement of research with the needs of practice (Willis & Mastrofski, 2018). Ways of merging research and policing are needed to make the most of the existing knowledge on policing. In addition, there is also a gap between the strategies at the top of the police organization and police practice on the street (Lipsky, 2010; Kelling, 2008; Bacon, 2013; Holgersson, 2005). Policies are often adjusted to fit practice, and may seem hard to apply to the routines created by practice. The idea of problem-oriented policing (POP), introduced by Goldstein (1990), constituted a turning point for the development of policing, with reactive policing being replaced by preventive, proactive policing ideas, and with research perspectives being widely adopted (see also Eck & Spellman, 1987; Reiss, 1971).

Evidence-based policing

One study that has had a major impact is the report published in 1997 on “What works in crime prevention”, a compilation of knowledge for police (Sherman Gottfredson, MacKenzie, Eck, Reuter, & Bushway, 1997; for a summary, see Sherman, 1998). The study provided a standard for the usefulness of research, and started a new drive for evidence-based policing (EBP). Since then, the EBP movement has been encouraged via the advance of experimental criminology, the development of research evidence in crime prevention, evidence-based policy initiatives, and the creation of EBP education programs. Although EBP was formulated at the end of 1990s, the positive effects of collaborations between research and policing had been known for a long time. Despite having from the start promoted the use of experimental research and the gold standard of the RCT (Bradley & Nixon, 2009), EBP includes several research perspectives (Ariel, 2018). EBP should not be interpreted and understood as a single theory of policing.

Instead it has been described as a paradigm for policing research and practice (Sherman, 1998; Weisburd & Neyroud, 2011). The EBP movement has been successful, with the creation of EBP societies in the US, the UK, Canada, Australia/New Zealand, and Spain (Mitchell, 2019). The contribution to policing research has been massive, and the development of the so called ‘Triple T’, targeting, testing, and tracking (Sherman, 2013), is one of many blueprints created for police research. This model for police-led science (Sherman, 2011) suggests that the police need to *target* specific fields of policing, and understand the problems relating to these fields, including the prioritization of places, individuals, and situations in order to then *test* the practices conducted in relation to them, and then *track* both the implementation and effects of the treatment, and follow developments in the targeted area, a process that was initially formulated as ‘what works’ (Sherman, 2013). The Triple T model has the potential to have a major impact on the integration of EBP into the overall work of the police (Piza & Welsh, 2022). The three steps reflect the ideas found in SARA model (Scanning, Analysis, Response, Assessment), which constitutes the outline of the problem-solving process described by Spellman in 1987. The principles are also found in other fields, such as medicine for example, where anamnesis and diagnosis must precede treatment and follow-up. When looking at the aims of EBP, by viewing policing in the same way as medicine, the goal is to make policing effective, reducing and maintaining lower levels of crime by using evidence-based methods.

The problems of research results remaining unused and the lack of implementation of research findings in practice (Bayley, 2009; Lum & Koper, 2017) are also obstacles for EBP (Lum et al., 2012; Brante et al., 2015; Neyroud & Weisburd, 2014). Numerous initiatives have been taken to enhance the merging of research practice with policing and to facilitate the use of research in police practice. Two examples are found in the systematic reviews of police research produced by the Cochrane Collaboration (Welsh, 2019), and evaluations of strategies mapped by the EBP Matrix (Lum & Koper, 2017). More general additions to the EBP movement have also been promoted. Neyroud (2020) has proposed a fourth “T” – transformation (Sherman, 2020). The idea here is that the best way to fill the gap between academic research and practice would be to identify how the transformation into EBP can be effectively implemented within the police. The essential question to answer is that of how many staff members – the critical mass – within the organization need to be trained, and within what time frame, to achieve the *transformation* of the agency from policing to EBP in all decision-making (Sherman, 2020).

Lum and Koper (2017) have focused on the *translation* of the existing scientific evidence into practice (Lum, Koper & Telep, 2011; Lum & Koper, 2017). This approach focuses more on how to strengthen decisions, tactics, and strategies on the basis of research and scientific methods than it does on the early goals of EBP (Ratcliffe, 2021). Lum and Koper (2017) have argued that the gap between academic research and practice, and also between policy and practice, could be bridged by the better implementation of research results via an improved communication between the two, often separate worlds. *Translation* is perceived as a means of creating receptivity by making the knowledge digestible to police organizations, and institutionalizing research results into police practice (Lum & Koper, 2017). The translational criminology concept includes the goals of successfully disseminating knowledge and the applicability of research to practice. Practitioners and policy makers are both essential actors, who contribute their knowledge of the context and organizational limitations of the police to the theoretical, statistical, and methodological expertise found among researchers (Laub & Frisch, 2016). This tradition also includes a strong focus on the gap between policy and practice, for which reason the role of the translational concept in the implementation process is preferred in this thesis.

Pracademic research approach

In sum, the research has focused on the presence of two gaps, a gap between police research and police practice, and a gap between police research and police policy, both of which have been identified as obstructing the progress of policing (Lum & Koper, 2017). Most police tactics are still not based on evidence (Granér, 2016), despite being driven by the goal of making police forces more cost effective in a period in which the police are under substantial pressure in relation to results, efficiency, tight budgets and acute crime problems (Sherman, 1998, 2013; Lum & Koper, 2017). One way to achieve the goal of EBP and to shape police research that actually makes an impact on practice is by conducting research within the police organization (Sherman, 2010; Lum et al., 2011; Neyroud, 2016). Some researchers have highlighted the pracademics that already exist within the police and the possibility of utilizing them more effectively (Sherman, 2020; Huey & Mitchell, 2016). A pracademic is an individual with one foot in academia and the other in practice (Volpe & Chandler, 1999; Posner, 2009; Sherman, 2013), and who often has the ability to merge the knowledge from both to create a stable understanding of the field under study (Braga, 2016). One means of bridging the two gaps identified in the research may thus be the use of pracademic

police researchers (Sherman, 2013) as translators between police research and practice (Braga, 2016), an idea which will be explored in several parts of this thesis.

This thesis is framed by the EBP movement and based on a pracademic approach. The topic under study, however, is the policing of drug crimes and illicit drug markets. The next section will describe the use of the term *open drug scenes*, but will begin by outlining the policing of drug crime and the Swedish context.

Policing drug crime

From the perspective of police practice, drugs are a part of criminality both as economically based serious crime (Mobilisering mot narkotika, 2004) but also in the form of drug use, a central contributory factor in for example violent crime, traffic accidents, and theft offending (SOU, 2011:35). Drug use is also linked to homicide, suicide, the use of weapons, and is also itself criminalized in some countries, for example in Sweden (BRÅ, 2000). Drugs are both a visible and hidden problem in society. To the police, drug crimes are almost exclusively identified by means of the policing of places and police tactics, rather than as a result of citizen calls (Holgersson & Knutsson, 2011). Minor drug offences are often detected when the police react to other crimes, such as theft, assault and car accidents (Ceccato et al., forthcoming). There are numerous types of drugs that are distributed throughout society on the streets, via the internet and also in the hidden, private sphere. In this thesis, drugs are defined as illegal mind-altering substances, also referred to as narcotics, and not including alcohol or tobacco.

A substantial amount of drugs are distributed via public, illicit drug markets (EMCDDA, 2021; BRÅ, 2021b). Police actions and collaborations with a large number of actors have been implemented around the globe to counteract these markets. Although acknowledged as a problem all over the world, and despite being dealt with in different ways, interventions rarely result in the closure of the drug market against which they are directed, but some effects are found in reductions in drug crime in relation to calls for service (Mazerolle et al., 2006; 2020). Place-focused drug law enforcement has been found to be more effective than unfocused interventions (Mazerolle et al., 2020). Nevertheless, few of the studies on drug crime interventions have been focused on the elimination of drug markets. The effects of policing drug markets may to date be described as they have been in a study by Cohen, Gorr, and Singh (2003): “*Results indicate that the police intervention suppresses levels of drug dealing during periods of active*

enforcement, but the effects largely disappear when the intervention is withdrawn” (2003 p. 257).

What research is needed in order to improve drug-market policing? In line with Sherman’s Triple T (Sherman, 2013), one proposal would be to improve place-based interventions, which requires a focus on analyzing and evaluating the actions that are taken. When we add the fact that there needs to be a translation of research in order to implement the findings relating to place-based interventions (Lum, 2008) into officers’ daily routines (Lum, 2009), the results from research on drug markets need help in influencing the strategies employed by officers on the streets. Lum and Koper (2012) also suggest a shift from a person to a ‘case of places’ strategy. Koper, Egge and Lum (2015) argue that the same amount of resources focused on individual crimes and individuals should be directed at places in order to control problem places. Police have a tendency to take short-term action (Koper et al., 2015). Alongside community interventions, the police have been using hot spots policing focused on crime hotspots, with police officers being deployed to a specified location for a specified amount of time on a recurring but irregular schedule (Koper, 1995; Telep, Mitchell, & Weisburd, 2014). Against this background, it seems that what is needed in drug-market policing is a more precise geographical focus on crime concentrations at identified micro places, in order to enhance hot spots policing and long-term initiatives against chronic hot spots. Since police officers mostly use reactive patrolling based on calls for service and incident investigation (Koper et al., 2015), an in-depth analysis of the locations in question would seem to constitute an appropriate next step.

Open Drug Scenes

In many countries, drug transactions and consumption take place at established, open-air markets. These markets share many of the same problems, such as poly-drug misuse, the spread of HIV, public nuisance, criminality, and violence (EMCDDA, 2015; McNeil, Shannon, Shaver, Kerr & Small, 2014), despite being located at long distances from each other and in contexts that differ in terms of culture, legislation, and societal organization.

In this thesis, the markets examined are termed open drug scenes (ODSs), a term that has been used by authorities in Sweden for a long time when referring to such markets. Since the thesis has the aim of involving practice and agencies that are active in drug enforcement in Sweden, this term has been used as a point of departure. Thus, the term did not have a known or specified definition in either

Swedish practice or research. Both Falk (1981) and Bless, Korf and Freeman (1995) use broad and vague definitions that are not suitable for this area of use, since they contain many forms of drug consumption. The intended places needed to be delimited in time and space and separated from non-open and invisible drug markets. The development of a definition of open drug scenes for the purposes of the thesis also incorporated an endeavor towards developing a clear concept that may be useful for practitioners from various fields. The definition employed in the thesis was formulated in Study I and reads: “a geographically durable place where the use and dealing of drugs takes place in public and is conceived as problematic by authorities and /or the public” (Magnusson, 2020).

The Swedish context

This section begins by describing the Swedish Police Authority, its organization, context and training. It then moves on to introduce Swedish police research and drug enforcement. Finally, this introduction will describe recent trends in crime, which also provide the basis for the research aims of the thesis.

In Sweden, police training has recently shifted to a university-based program, and a structural reorganization of the police in 2014 has been accompanied by a shift towards an employee-driven philosophy within the police organization (Ju, 2012:16). The philosophy of employee driven development is believed to counteract some of the distance between policy and practice (Ju, 2012:16). A decrease in the number of serving police officers led the police authority to invest in a new initiative in 2016 to increase police staff numbers to a total of 40,000 employees by 2024. Today the police force includes over 34,000 employees, of whom 21,000 are police officers (Swedish Government, 2021). Levels of public trust in the police are high in Sweden, based on both international and national measurements (Kääriäinen, 2007; GfK Verein, 2018), and have in fact increased since 2017 (BRÅ, 2021c).

Police research in Sweden is conducted in several different environments, but with no national coordination (Sarnecki, 2021). BRÅ, the Swedish National Council for Crime prevention, is an institution responsible for collecting and analyzing Swedish police data and for conducting research and evaluations, and providing support to the police authority. However, the demand for research and support is so great that it cannot be met by BRÅ (Sarnecki, 2010). Police-related research is conducted at several universities, mainly at departments of criminology, but also within the fields of sociology, psychology etc., and some of the

country's five police training programs also employ researchers. There has also been a notable increase in research on the police conducted in the form of collaborations between the police and universities, and by researchers embedded within the police organization (see Gerell, 2021b for an example).

Within the police, the Swedish Leadership Program began to include EBP in 2009, with students being sent to the Cambridge University Police Executive Program to participate in a Master's in Applied Criminology and Police Management. Since then, about 25 individuals have attended the program and six have completed the two-year master's course (M. Rinaldo, personal communication, Februari 25, 2021). EBP has been promoted explicitly in Sweden since 2010, when Sarnecki suggested EBP as a means of improving the cost effectiveness of the police in a report on police management (Sarnecki, 2010). In 2016, a police conference on EBP directed at police chiefs was organized by the former National Police Commissioner, Dan Eliasson. In 2018, the government made demands that the police should more clearly connect with research and gather police research conducted in different research settings. In 2019, the current National Police Commissioner, Anders Thornberg, appointed a Director of Research to his head office in Stockholm with the goal of establishing an advisory board for police research (SvD, 2019). This indicates that some efforts are being made to promote EBP both implicitly and explicitly. Nevertheless, the Swedish Police need to find ways to meet their own demands for research and to improve the preconditions for EBP, for example by easing bureaucratic obstacles and enhancing access to advanced software (Gerell, 2021b).

The need for applied research has recently been acknowledged, and in 2021 the Swedish Government announced funding for a four-year research program on crime to be administered by the Swedish Research Council, Vetenskapsrådet. This massive investment has the aim of improving knowledge on crime causation, effective prevention, methods to improve security, and evidence-based practice, and with a focus on the inclusion of applied research (Prop. 2020/21:60). The processes of leading and implementing this large-scale research program has started, and it has become clear that there is a need for coordination of the scattered police related research being conducted in Sweden (Sarnecki, 2021).

Another recent structural change that is of interest to this thesis is the allocation of responsibility for crime prevention to the municipalities, which was proposed by a governmental inquiry in 2021 (SOU, 2021:49). The report from the inquiry recommended the goal of improving crime prevention practice by means of

legislation requiring municipalities to map problems, plan and follow up interventions and take responsibility for the collaborations required to achieve these ends. This will come to have an impact on future crime prevention.

In drug crime policing, the broad perspective for the Swedish police is that of zero tolerance and the creation of a drug-free society (Tham, 1995). A more realistic goal, specified in the Swedish Police's appropriation directions has historically been to reduce the supply of and demand for drugs, and recruitment into drug use. Sweden has restrictive drug legislation, and drug use has been criminalized since 1988. Since 1993 the police have been able to conduct compulsory body searches and blood/urine tests in connection with a suspicion of drug use (BRÅ, 2000).

In Sweden, the policing of drug crime has been viewed as *a war against drugs*, but has also been based on a philosophy of identifying new addicts and directing abusers to health care services (Tham, 1995; BRÅ, 2000). The prevalence of drug use in Sweden is relatively low in a European comparison (EMCDDA, 2021). Nevertheless, given an increase in reported mental health problems among young people in Sweden (Lager, Berlin, Heimerson & Danielsson, 2012), drug addiction is one consequence. Furthermore, there is research showing strong links between perceptions of neighborhood social disorder (such as criminality, violence and drug dealing) and mental health problems (Aneshensel & Sucoff, 1996). There has also been an increase in drug-related deaths in Sweden, with Sweden reporting the highest number per capita in Europe in 2018 (EMCDDA, 2020). There was then a small decrease in 2019, but Sweden still maintains a top placement in this context (EMCDDA, 2021). Research also shows socially vulnerable groups such as unaccompanied refugee minors ending up in drug addiction in Sweden (Ivert & Magnusson, forthcoming), and there have also been worrying developments in Sweden regarding the establishment and effects of drug markets (BRÅ, 2021b).

On top of this, recent crime trends include an increase in gun violence that has attracted a great deal of attention in the media both in Sweden and worldwide (Forbes, 2021; The Guardian, 2021). This increase in gun violence has been identified as having occurred over the course of a decade, predominantly in the young male population (Sturup et al., 2019). The trend has placed Sweden at the top of a European comparison of gun homicides among young men (based on population size) (BRÅ, 2021a). A growing impact from criminal networks has also been identified in Swedish society (Swedish National Police, 2017; 2021; BRÅ,

2021b). The trend in the establishment of criminal networks, social vulnerability, and violent gangs is producing challenges for the police in Sweden, such as a growing number of shootings and low clearance rates in gun violence investigations and homicides (BRÅ, 2021a; Granath & Sturup, 2018). Stricter gun laws were adopted in 2020 in order to stop the growth of gun violence, with effects being seen in increased numbers of arrests and incarcerations but with as yet only small effect in the form of a decline in gun incidents (Brunner, Rostami, Gerell, Sturup & Khoshnood, forthcoming).

Another recent development was the decryption of the communication service, *EncroChat*, by French authorities and Europol in 2020. The EncroChat platform is in Sweden primarily used as a widespread, illicit drug network among actors with a high level of criminal capacity. Similar developments have involved the decryption of the *Sky* and *Anom* services. The decrypted material was passed on to police agencies in many countries in order to prosecute involved actors. In Sweden, the material often included criminals with a high propensity for violence and a low threshold for the use of lethal violence (Swedish National Police, 2021). The EncroChat material resulted in numerous investigations and arrests during 2020-2021, in which planned homicides were interrupted and high-level criminals incarcerated. Large amounts of weapons, drugs, money and explosives were seized (Swedish National Police, 2021). Despite successful investigations, arrests and seizures, there has as yet been no decrease in gun violence.

Neither the increased restrictions in gun legislation nor successful policing actions focused on the highest levels of criminals involved in the illegal drug trade and gun violence have yet led to a decrease in drug markets or gun homicides. Despite new policies and successful investigations, drug markets, gang criminality and gun violence still continue to drain police resources, intimidate residents and puzzle researchers.

Swedish settings differ somewhat from the US in terms of city structures, with Sweden's troubled neighborhoods, especially in Stockholm, being located on the outskirts of the city, in contrast to many US cities, where they are located downtown (Andersson, 1998). Sweden has been known for being a welfare state, with social structures established to enable equal rights to education, health care and social support (Alatalo & Ostapenko, 2014; Svensson, 2010), and with criminal policy earlier viewed as part of social policy (Tham, 1995). The society has been seen as safe, and levels of crime and violence have varied without standing out. The economic gaps between rich and poor have been relatively small in

comparison with European measures, and Sweden still has lower levels of inequality than most European countries, but there has nonetheless been a rapid increase in inequality (OECD, 2011). The recent increase in income inequality has been seen as a result of a spatial concentration of poverty, which has created growing residential economic segregation (Scarpa, 2015). This recent development is challenging the ideas of the Swedish model, with effects in the form of residential segregation and disadvantage (Scarpa, 2015).

There is a lack of research targeted on drug markets and their effects in Sweden. Targeted research is needed focused on Swedish conditions, since Swedish culture, societal organisation, legislation and the Swedish police organisation differ from those of the most researched contexts of the US and England. Research on drug markets in the Swedish context is needed in order to develop evidence-based policies and policing methods in this area.

THIS THESIS

Aims

The overarching aim of this thesis is to increase the knowledge on open drug scenes in order to improve the effectiveness of the police response, but also to explore ways to enhance the progress of evidence-based policing in Sweden. The study area is Stockholm County, which includes the most populous city, and capital of Sweden, Stockholm. The first study (I) targets the main focus of the thesis, *open drug scenes* (ODSs) on the basis of several sources concerning their locations, effects and links to other forms of crime and citizen safety. The objective is to understand the scope of the problem in neighborhoods, and to categorize different types of ODSs. The second study (II) targets the main problem currently associated with ODSs in Sweden, namely gun violence. The aim is to explore the overlap between ODSs and gun violence, and to predict micro places that are characteristic for gun violence and attempt to find clues to allow for the prevention of negative developments. The third study (III) delves into a police tactic at an ODS, and evaluates the use of motivational talks on the basis of a randomized controlled trial. The fourth and final study (IV) expands on the evaluation presented in study III and explores the use of experimentation within police practice and the effects of having pracademic knowledge. This is done within an EBP philosophy and on the basis of a pracademic point of departure. Together these four studies will contribute to research regarding the studied field of policing ODSs, but also regarding evidence-based policing in Sweden.

THEORY AND EXISTING RESEARCH

Theoretical framework

As an introduction to the four studies in the thesis, this section first presents a theoretical framework for the understanding of ODSs, followed by an overview of empirical studies in the research field of drug markets. There are various theoretical explanations of crime, and the structure of crime might be distinguished using different parts of these theories. One division of perspectives is based on whether the individual or the structure is viewed as the most important reason for crime. The theoretical framework presented here focuses on theories of social disorganization and collective efficacy (Shaw & McKay, 1942; Sampson, Raudenbush & Earls, 1998), routine activities (Cohen & Felson, 1979), situational action theory (Wikström, 2004) and the geographical perspective of crime at places (Brantingham & Brantingham, 1993).

Theory of social disorganization

There are several theoretical perspectives applicable to an understanding of ODSs. The theory of social disorganization (SD) is especially useful when it comes to comprehending differences in crime levels among neighborhoods as a result of its spatial orientation. Social disorganization theories emerged from the early work of Shaw and McKay (1942) and are based on a perspective in which socioeconomic structure and social processes are in focus. Economic status, ethnic heterogeneity, and residential instability were seen to disorganize communities and create subcultures of delinquency (Shaw & McKay 1942). Informal social control has played an important part in more recent adaptations, as for example in theories of collective efficacy (Sampson, Raudenbush & Earls 1997, Gerell, 2017) where the explanation for some areas having more crime than others is

based on collective strength as a protective factor. Low collective efficacy makes people less prone to intervene in relation to unwanted behavior and activities. The socioeconomic structure perspective is a commonly used explanation for the level of disruption in neighborhoods. The composition of the inhabitants in terms of for example age, ethnicity, education, and employment plays a role in the well-being of neighborhoods. The residents of poor neighborhoods are hypothesized to be preoccupied with survival rather than focusing on social organization (Kornhauser, 1978), and high levels of residential in- and out-mobility create weaker bonds and a depletion of community strength (Sampson et al., 1997).

The main contribution of this perspective to the understanding of ODSs is the focus on *place* and community *structure*. These theoretical ideas are easily transferred based on the geography of living contexts and they therefore appear useful in relation to the spatial focus of ODSs. In these theories, however, the unit of analysis is the neighborhood, which is too large in relation to the study of ODSs, since drug markets instead contain only a few blocks (Weisburd & Green, 1995).

Since the testing of social disorganization theories nevertheless seems difficult (Dolmén, 2002; Weisburd, Groff & Yang, 2012; Braga & Clarke, 2014), the empirical studies presented in the next section will provide additional knowledge beyond this theoretical reasoning. Before moving on, however, another useful theoretical perspective, this time focusing on individual acts, will be outlined.

Routine activity theory

One perspective on the explanation of crime which has the potential to further our understanding of ODSs involves theories based on routine activity theory (RAT) (Cohen & Felson, 1979), which focuses on the opportunity for crime at a micro level. Based on the control theories developed by the Chicago School, this theory argues that the opportunity to commit crime is related to three factors: a lack of guardianship, a motivated offender, and a suitable target (Cohen & Felson, 1979). In the current instance, guardianship can be translated as involving the police, security staff and informal control by citizens. Criminal opportunity theories link the three factors needed for crime to occur to locations. When focusing on geography and areas smaller than communities, researchers have suggested that theories of opportunity focused on place and time constitute a helpful complement to disorganization theory (Weisburd et al., 2014; Weisburd et al., 2016; Bursik & Grasmic, 1993). The routines of daily life become an important process for researchers to follow, since the likelihood of crime will depend on how people

spend their time. This expands the study of the situations and locations of crime to society as a whole, and not only to a focus on poor or socially disorganized areas. This theory is also founded on changes that have occurred in society in terms of a movement from the home to public space and emphasizes the importance of the time spent in the public spaces (Cohen & Felson, 1979).

An important development in this perspective is found in crime pattern theory (Brantingham & Brantingham, 1991; 1993) which places specific locations in focus as attractors and generators of crime. Public transport hubs constitute a typical crime generator, since they attract large numbers of people due to their accessibility (Gerell, 2021a). Illicit drug markets, which create specific crime opportunities, constitute a typical crime attractor. This theory distinguishes smaller locations as the contexts in which crime happens. The geometry of crime in this theory views the *pathways* and *activity nodes* of human activity as central to where crimes will occur. In addition, the *edges* of areas, where the geography changes both socially and physically, are also found to have an impact on crime patterns (Brantingham & Brantingham, 1993; 1995; Brantingham et al., 2009). Crime pattern theory also includes the interaction between individual predispositions and the environment. The criminogenic environment perspective ascribes some part of the responsibility for crime to places characterized by favorable conditions for crime.

As in the case of disorganization theory, it is difficult to simultaneously test all the dynamics of routine activity theory and crime pattern theory empirically (Dolmén, 2002). More recent research has had some success (See Gerell 2021a; Weisburd, Groff & Yang, 2014).

The usefulness of RAT is primarily found in its focus on *individual acts*. Applied to ODSs, the theory might be applied to the locations of suitable targets, motivated offenders and a lack of guardians (Cohen & Felson, 1979). The prioritization of police resources might affect why crimes take place at certain locations, such as ODSs, and why these locations have been able to remain or even expand, since they could be seen as attracting crimes and offenders (Brantingham & Brantingham, 1993).

Situational action theory

Combining the two theoretical perspectives of SD and RAT has been viewed as useful by several researchers, despite the two in part overlapping in their

reasoning (Wikström, 1998). For example, informal social control is central in both theories. The importance of individual versus area characteristics varies among theories drawing on the social disorganization perspective, with Wikström (1998) for example finding an interactive explanation to be the most useful (Wikström & Loeber, 2000). In situational action theory (SAT), Wikström (2004) combines the impact of individual and structural factors when explaining why crimes happen. SAT (Wikström 2004; Wikström & Treiber, 2018) adds the intersection of people and settings (propensity and exposure) to the explanation of crime (Wikström, Ceccato, Hardie & Treiber, 2010). Individuals are steered both by their own will and motivation, and by the situation, and this could help explain why only a few commit offences even in the most troubled areas (Wikström, 2004). Individual morality is used to explain how individuals in the same situation act differently from one another. Reasons or the motivations to commit crime may take the form of wanting to obtain money or respect, or a need for security, but such decisions are also affected by emotions and habit (Wikström & Sampson, 2003). According to Wikström and Sampson (2003), individuals differ in their propensity to break rules as a result of variations in self-control and morality. In this thesis, the focus will be directed at the geographical aspects of crime, while temporal aspects will be discussed briefly in the future recommendations section. The contribution made by SAT is its focus on actors at locations. Drug markets might also theoretically be a product of individuals' characteristics at the relevant locations.

Geography, geometry, and ecology

In this thesis, the exploration of ODSs proceeds from an ecological, geographical, criminological perspective. Different parts of a city have varying prerequisites for crime due to the social structure of different areas (Shaw & McKay, 1942), individual acts at locations (Cohen & Felson, 1979) and the situations created via interactions (Wikström, 2004), but this could also be linked to how the areas are used and built. Social life within neighborhoods is formed by area conditions such as socioeconomic status, but according to Wikström (1990), the physical mechanisms and land use of areas have an impact on how people act. Differences in land use between areas facilitate different types of activities and at different times of the day, which means that the participants involved in these activities also vary greatly. Social activities differ for example between areas characterized by owner-occupied houses and areas characterized by rental apartments (Wikström, 1990). The geographical characteristics of places may therefore be linked to

crime levels. Theories of land use have assumed that, as a result of their ability to produce social control, residential areas have a mitigating impact on neighborhood crime (Boessen & Hipp, 2015), whereas non-residential land use is viewed as being more vulnerable to crime due to the anonymity and unfamiliarity associated with foot traffic, for example (Reynald, 2010). Mixed land use areas, with a combination of residential and non-residential land use, might consist of a square that contains rental apartments, grocery stores, and a bar. These areas might be seen as both being protected from crime, if the business owners and store employees produce additional guardianship in the area for example (Browning et al., 2010), and more vulnerable to crime, due to a decrease in social monitoring, with a larger number of unfamiliar people moving around (Wo, 2019). This means that even within neighborhoods, activities vary from the local square (mixed land use) to the street segments between houses (residential) or parks (non-residential) as a result of their ecology. Socio-ecological models have found support in vastly different national contexts (Sampson & Wikström, 2008). These ideas are linked to RAT through the way in which opportunities for crime are dependent on both variations in social control and the variation in participants between locations. In relation to the concepts of crime pattern theory, at some times of the day a location might attract lots of offenders and victims, while at another time attracting legal activities. Applied to ODSs, the physical and geographical characteristics of areas with drug markets may be central to understanding levels of crime and violence, and may also help in creating prevention strategies.

Despite being unable to account for all dimensions of the dynamic and multi-layered reality of the relationship between crime and neighborhoods, these theories contribute to an understanding of the origins of crime in space and time via a focus on the use of place, structure, individuals, acts and land use. Nevertheless, there are also limitations to their ability to provide a theoretical understanding of present-day ODSs in Stockholm, Sweden, particularly those theories that are based on the American social structure of the past. The next section will present empirical evidence relating to drug markets, adding to the background on which this thesis is based. First, the geographical point of departure of the studies in this thesis will be narrowed down in line with the place-based research focus of EBP.

Existing research

Geographic micro places and crime concentration

One central research field within the EBP movement is found in place-based criminology, which directs its focus at locations rather than individuals. A focus on places rather than individuals has been advocated by several researchers (Koper et al., 2015; Weisburd, 2015). There is evidence to support the view that small areas, micro places, in the same way as small numbers of individuals, can account for disproportionately high amounts of crime (Ratcliffe, 2006; Weisburd 2015; Sherman, 2007). Weisburd (2015) has labeled the recurrent findings of substantial concentrations of crime “the law of crime concentration”. This place-based criminology, which is focused on crime prevention efforts, is based on identifying small units for the purposes of resource allocation (Lum et al., 2011; Weisburd, 2008; Weisburd & Telep, 2014). Several evidence-based methods have been developed in this line of research, such as hot spots policing. It has been found that locations with stable concentrations of crime are also an easier target on which to focus interventions (Weisburd et al., 2012). Criminogenic settings and crime concentrations are just two of the areas of theoretical development linked to the focus on place/location. The issue of the unit of analysis has also been central to the development of the criminology of place (Sherman, Gartin & Buerger, 1989). Geographic criminology (Bruinsma & Weisburd, 2014) has over the recent decades moved towards a focus on micro-geographic units (Weisburd et al., 2009). Within the field of crime analysis focused on the micro-geographic level, research continues to focus on different units. Depending on the features of a given analysis, the micro-area unit will need to vary between the street segment, block, facility (Eck, Clarke & Guerette, 2007), square and so on. The unit also matters in relation to police practice, since evidence-based crime prevention tactics are employed in relation to micro places.

Drug markets vary in size depending on the definition employed. A unit of analysis based on a few blocks (Weisburd & Greene, 1995) is more precise than one based on a whole community, whereas the use of an exact point would create the opposite problem of being too specific compared to the actual ODS area. Studies suggest that drug-market locations are characterized by crime concentration (Weisburd & Green, 1995; Lum, 2009; Eck, 1995) and also show that these micro areas account for large proportions of reported crime (Taniguchi, Ratcliffe & Taylor, 2011; Weisburd & Mazerolle, 2000). Crime is found both to concentrate

and persist at drug markets, places that often are risky and that sometimes also encourage violence (Eck, 1995). The concentration of crime at drug markets may be related to the crime attractor concept found in crime pattern theory (Brantingham & Brantingham, 1993). Weisburd, Green & Ross (1994) found for example that places perceived as drug markets were characterized by an overrepresentation of crime calls for several types of crime.

Drug markets and violence

There is a strong link between drug markets and violence. The violence at drug markets ranges from minor offences to serious crimes such as homicide, and there are both violent and non-violent drug markets. The explanations for levels of violence at drug markets vary. To begin with, the illicit nature of drug markets itself provides a ground for violence. Andreas and Wallman (2009) have discussed the lack of access to legal means as a reason for using violence to protect and punish, in order to maintain illegal interests in markets. This level of explanation is based on the fact that the drug trade and sometimes drug use are illicit, which means that problems and conflicts that originate in drug markets cannot be solved by legal means, and are thus dealt with by means of illegal settlement strategies that are often based on violence. Market share, and the money invested in the drugs intended for sale, create a need for protection, and in consequence explanations for differences in levels of violence have also been found in the nature of the goods that are traded; the type of drugs that is sold has an impact on the situation at a drug scene (Reuter, 2009; DEA, 1996). The explanation for this lies in the lucrativeness of different substances, and thus the value of different substances may play a part in violence levels (Friman, 2009).

To understand the varying levels of violence at different ODSs, the nature of the surrounding area is also important. The social structure of different areas plays a role in the violence at drug markets. In some studies, the presence of ethnic heterogeneity and housing stability appear to function as a protective factor in relation to high levels of violence (Johnson, 2016). In Sweden, Gerell and Kronkvist (2017) found that ethnic heterogeneity explained disorganization better than poverty. Other studies have found that there are confounding variables, and that it is these that explain social disorganization rather than ethnicity per se. Some studies show that poverty and a lack of resources provide a better explanation of the level of disorganization, and this might affect levels of drug crime and violence (Lum, 2008; 2011). Further, Sutherland et al. (2013) found a positive correlation

between ethnic diversity at the neighborhood level and collective efficacy, meaning that ethnically diverse areas were found to have higher levels of collective efficacy, in contrast to many studies that have found the opposite. Berg and Rengifo (2009) have found that violence in neighborhoods is dependent on drug markets and not the vulnerability associated with factors such as low socioeconomic status in the areas concerned. Self-control and respect for rules are developed as part of the socialization process, which is affected by the context but also by peers. Some research shows that there are larger proportions of youth with low self-control in disadvantaged areas (Wikström & Treiber, 2016). Higher levels of youth characterized by a propensity for crime, low impulse control, and high exposure to violence, would lead to expectations of a higher level of violence.

The individuals present at drug markets and in the surrounding area have been found to impact drug-market violence, a finding which may be viewed from different perspectives. Age matters in the analysis of drug-market violence. Proportionately speaking, young men account for a larger share of violent crime than other age groups (Blumstein, 1995a). The peak in a violent criminal career comes early, at the age of 18-22 years (Reuter, 2009), which may impact the level of violence at drug scenes in areas with a higher proportion of youths in the population. Another explanation is linked to individuals' use of different types of drugs. Some substances, such as cocaine, stimulate aggressive behavior, while others have a calming effect. Nonetheless, substances alone cannot explain differences in violence, since the same substances give rise to different levels of drug-market violence in different countries (Friman, 2009).

Research shows clear between-country differences in the total level of violence at drug markets. Some countries seem to have mostly calm drug markets, and only some show problematic violence (Lum, 2008; Reuter, 2009). Some research has found that it can be difficult to distinguish between markets and their participants when it comes to effects on violence, depending on the substance involved (Felson & Bonkiewics, 2013). Some studies have also shown that increased violence at drug markets may also be an effect of policing activities (Reginato 2000, Moeller & Hesse 2013, Andreas & Wallman, 2009).

Violence at drug markets affects society in different ways. Serious crimes attract more attention from the public, the media and from the police, which may in itself have a negative effect on communities, for example in the form of well-resourced individuals and investment moving to other areas. Research has furthermore

established that being exposed to violence in one's local environment leads to individuals becoming more prone to using violence themselves (Patchin et al., 2006).

Drug markets, gun violence and gangs

There seem to be several ways in which drug markets, gun violence, and gangs are linked. Docherty et al. (2020) found that drug dealing at a young age was linked to later gun carrying. Further, gang activity has been found to be more lethal and violent at drug markets (Pyrooz et al., 2016; Block & Block, 1993). Research has also shown links between gun violence and gangs (Block & Block, 1993). Gun violence research shows that reciprocity serves to drive the continuation of violence and gang murders over time (Papachristos, 2009). Honor, status, reputation, masculinity, and power are of symbolic value, and are central to and maintained in criminal settings through violence. This form of retaliatory violence has been observed in research conducted on gangs and gun violence. The line of research that might help us to understand the development of gun violence is based on the use of interactive group behavior to explain why violence and murders occur. Gould (2003) added an important perspective when arguing that hierarchal structures with fixed roles are less likely to result in disputes over dominance, and that the problem is rather unstable dominance relations, which would tend to produce more violence. Near-repeat patterns, in which crimes repeatedly occur at the same location within a short period of time, have also been found to apply to gun violence (Ratcliffe & Rengert, 2008). Research on near-repeat patterns of gun violence in Sweden specifically show a strong link to drug markets in socially vulnerable areas (Gerell et al., 2021).

Gun carrying has also been found to spread like a contagion; where there are guns, individuals obtain more guns in order to protect themselves (Blumstein, 1995b). This pattern of contagion has been found separately for both gang criminality (Brantingham, Yuan & Hetz, 2021) and gun violence (Green et al., 2017; Papachristos et al., 2015). Gun violence has both a substantial negative effect on communities and gives rise to higher mortality levels. There is also evidence of effects of gun violence on youths' school results in affected neighborhoods (Sharkey, Schwartz, Ellen & Laco, 2014). Gun carrying has been shown to develop from having been exposed to violence (Patchin et al., 2006). The fear produced by gun violence, and the dangers involved in participating in such violence, are significant factors in relation to violent drug markets. The cost in deaths,

injuries, and suicides are a central aspect of gun carrying (Cook, 2020). The trade in drugs and gun violence produce huge costs not only in terms of death and suffering among the individuals directly involved, but also for society as a whole in terms of unsafety, living conditions and the wellbeing of neighborhoods (Cook, 2020). Fear leads to people and businesses moving away if they can (Skogan, 1992; Fisher, 1991). A recent Swedish study identified decreased property prices following gun violence incidents in affected neighborhoods (Wilhemsson, Cecato & Gerell, 2021, Preprint).

Summary

Taken together, the research shows evidence of crime concentrations and a violence overlap at drug markets. Gun violence, as a result of the effects it produces, constitutes a particularly important part of the drug-market problem with regard to both neighborhood wellbeing and drug-market development. Despite the different explanations presented in relation to drug markets and violence, there are inequalities in the level of exposure to these locations and their problem levels, which leads to certain places and groups in society being more exposed to pressures, risks and problems than others. At many of these locations, violence is the most disturbing consequence for both residents and other members of the public. The violence seems to be linked to the contexts in which the drug scenes are located. In order to even out these inequalities, research is needed on Swedish conditions in order to identify which variables are important for the link between drug markets and violence, and not least between gun violence and different areas in Sweden. The worrying trend in gun violence in Stockholm (National Swedish Police, 2021) makes it even more vital to include Stockholm in the analysis. Despite the insights into drug markets and violence presented in the research, questions remain about the effect of these locations on neighborhoods in Sweden.

METHODS

Research approach

For the purposes of this thesis, the Triple T strategy for policing proposed by Sherman has been expanded into a quadruple T approach, with the addition of *translating* the evidence, as proposed for example by Lum and Koper (2017) – Targeting, Testing, Tracking and Translating. The choice to include translation was based on its well-researched contribution to the merging of practice and research. The concept of translational criminology involves a broad perspective on implementation issues related to policing, including both policy and practice. The process of translation between academia, policy and police practice was also well-known to the pracademic researcher conducting this thesis. In this thesis, translation is achieved by means of the pracademic approach employed in Studies I, II, and III, mainly in terms of the studies’ research questions and methods, but also more specifically through the design of Study IV, the meta-study¹.

Table 1. Overview of methods and the corresponding Ts relating to EBP.

4T /4 M studies	Mapping ODSs	Micro-place analyses	Method evaluation	Meta-study
Targeting	X	X		
Testing			X	X
Tracking	X	X	X	
Translating	X	X	X	X

¹ The term meta-study is here used to refer to studying a study, in the same sense that a meta-discussion is a discussion about a discussion. Thus the term is not referring to a meta-analysis, i.e., a statistical analysis that combines the results of multiple scientific studies.

The overarching strategy involves targeting ODSs, testing and tracking police efforts, and translating knowledge on ODSs and the use of the experimental approach to practice and research. This was achieved through the use of mapping and micro-place analyses of ODSs in Stockholm, the methodological evaluation of a police tactic by means of an RCT, and finally, a meta-study focused on implementation and pracademic research in the form of a case study and survey of police officers.

Table 2. Overview of measures and methods used in Studies I-IV.

Paper	Explored relationship	Data	Methods	Outcome measure
I	ODS characteristics, crime concentration, and unsafety.	Survey responses from local police officers, crime data, data from citizen fear of crime survey.	Survey, spatial data analysis (KDE), SC, statistical analysis.	Open drug scene descriptives, symptoms, and crime concentration and categorization.
II	ODS and gun violence overlap, demographic variables, and gun violence prediction.	Crime data, spatial data on ODSs, gun violence, demographic grid-net data.	Spatial analysis, merge, join, selection tools, KDE, vector-grid analysis, significance testing and regression analysis, index modelling, prediction accuracy validation, PAI.	ODS-gun violence overlap, micro-area analysis, predictive index and models.
III	MIIs and relapse in drug crime.	Experiment and control group data, RCT outcome data, crime data on relapse.	RCT, chi-square test, group comparisons.	Evaluation of MIIs ² conducted by police officers with offenders.
IV	RCT implementation process and pracademic understanding.	Implementation process steps and the RCT process, survey data.	Case study of the RCT and survey analysis using STC and phenomenological analysis.	Effects of pracademic knowledge on design and implementation of an RCT.

Targeting drug markets

The first step in improving policing according to EBP involves targeting specific fields and collecting as much knowledge as possible in order to understand the problems (Sherman, 2013). There are numerous ways in which knowledge on drug market has been collected. Empirical studies have presented results that describe the situations, characteristics, individuals, transactions (Olaghere & Lum,

² Motivational Interviews, MIIs, are an evidence-based method used for example in health care institutions, which the police have been using in a police format labeled motivational talks.

2018), relations (Reuter, 2009), and crime concentration (Weisburd & Green, 1995) associated with drug markets, and also the overlap between drug markets and violence (Lum, 2008). A large number of research findings focus on drug markets as indicators of, for example, disorganized areas or as a part of the cause of violence in neighborhoods, but the aim of these studies is often directed at understanding something other than the drug-market phenomenon. There are as many methods as there are research questions relating to the exploration of drug markets. These methods range from observations of places or persons, interviews with drug-market participants, gang members or residents in the area, the mapping of drug crimes, police surveys, crime data analysis, risk terrain modelling etc.

This thesis uses a geographic information system (GIS) to analyze and visualize the data in Studies I and II. One advantage of the GIS program employed is the way it facilitates the visual display of data, expanding the understanding of places. The use of data processing programs in policing has expanded rapidly over recent years (Markovic, 2007). The field of place-based criminology and an environmental focus on the use of geographic analysis is also becoming more and more common in policing (Chainey & Ratcliffe, 2005; 2013; Levine, 2006). The difference between regular data and spatial data is that the latter include Geographic Information System coordinates. Police forces everywhere produce and store almost unlimited amounts of data. Police statistics are widely used for the purposes of steering, following, and criticizing the police. Counts of reported and cleared offenses play a role in political decision making, media reports, and the allocation of budgets, but also affect levels of confidence in the police (BRÅ, 2021c). Recently, there has been a growing focus in police work on the Global Positioning System, (GPS) and the location of crimes, and research on the geography of crime is expanding.

The thesis studies drug markets by taking on the challenge of creating a definition of open drug scenes, and by then mapping ODSs, analyzing their characteristics, and categorizing them in Study I. Study II examines the overlap between drug markets and gun violence using spatial data analysis techniques, such as kernel density estimation, vector-grid analysis and statistical methods such as regression analysis and index modelling. In order to predict gun violence at micro places, socio-demographics were modelled and compared to ODSs as predictors of gun violence. A summary of the methods used in Studies I and II are presented in

Table 2, and a detailed description can be found in the articles presented in the second part of this thesis.

Testing a police tactic

In order to improve the results of police practice, evaluation constitutes the second cornerstone of the Triple T, the *testing*. Within the EBP movement, randomized controlled trials (RCTs) have been promoted as constituting the research standard needed to transform police performance (Sherman, 2010; Neyroud, 2017). An RCT is based on a division into two groups, an experiment group and a control group. The treatment to be evaluated is randomly assigned to individuals by placing them in one of these two groups, and the outcome for the treatment group is then compared to that of the untreated, control group. This procedure serves to achieve sufficient control over other circumstances, thus excluding other explanations for the results than the treatment itself.³ The strict methodology of randomized controlled trials offers easily interpreted results for policing. Some researchers argue that RCTs are difficult to transfer to the field of policing, and that the method is overvalued (Moore, 2006; Sampson, 2010). This criticism of RCTs is mainly based on the argument that not all policing is suited to the form of an RCT, and that RCTs are difficult to complete in the field of policing practice due to ethical issues and high costs (Sampson, 2010).

Applied to this thesis, the targeting of ODSs was completed in Studies I and II, while the third study completed a test of a policing tactic employed at ODSs. An RCT was created to evaluate the police use of *motivational talks* with abusers performed by police officers. Motivational interviews, MIs, are a method used in institutions such as health care to motivate individuals to adopt better lifestyles (Miller & Rollnik, 2012). The method is evidence-based in its original design (Lundahl & Burke, 2009), but the police in Sweden use an untested version more accurately labeled motivational talks in encounters with abusers to encourage them to seek help. The random assignment of motivational talks created two groups of abusers, one of which was exposed to the motivational talks tactic. Individuals in the control and treatment groups were then compared in terms of their relapse into drug crime to explore the effects associated with motivational talks. The method for testing police performance at the ODSs was designed in

³ Although there is always a risk that unknown uncontrolled factors may have had an influence on the experiment.

collaboration with the local police district responsible for the largest and most well-known ODS in Stockholm.

Translating to bridge the research-practice gap

In order to advance EBP, the problem of implementing research in practice described in the introduction needs to be addressed. One way of finding keys to implementation is to study and learn from research that has been implemented. Understanding the way research has been implemented in other departments and police forces may provide ideas about how to overcome obstacles and learn from others' mistakes and shortcomings. Even looking at the way research is conducted in practice may help us to foresee problems and identify shortcuts.

Implementing experiments or change in a good way seems to share many key ingredients with the creation of good program evaluations. Lipsky (2010), who has studied organizations such as police authorities and other public servants, coined the concept of 'street-level bureaucrats' and has argued that the implementation of guidelines is always dependent on those (the street-level bureaucrats) who are supposed to conduct the practices in question. Similarly, research on program evaluations shows that key elements for success include a knowledge of organizational factors, the nature of the relationship between the program and its clients, and the interest of stakeholders (Rossi et al., 2018). The importance of having an interested audience for a program evaluation (Rossi et al., 2018) may be linked to the level of preparedness required to conduct experiments and implement change, as discussed in implementation theory (Lipsky, 2010).

A respectable evaluation of drug policing should help both practitioners, in this case the officers on the streets, and also the strategic leadership at the regional level and municipal directors, in order to create collaborations and interventions that produce less drug use, less drug crime, and safer communities.

The RCT conducted in Study III was dissected in the fourth study in an attempt to explore implementation processes and roles in policing research. Study IV thus analyzes the design and implementation of the RCT by comparing the RCT to guidelines on how RCTs should be conducted (Sherman, 2010), in which the RCT process itself constitutes the data that are examined. The analytical approach can be viewed in terms of a case study, in which the design and implementation of the RCT was carefully studied and broken down into its constituent parts. A survey of police officers who participated in the RCT was conducted, and the

responses analyzed, and this analysis was then added to the study of the implementation of the experiment.

Data

New data

The research presented in this thesis has involved the creation of several new data sets. In Study I, the first ever data set on ODSs in Stockholm County was produced by means of a survey on ODSs conducted among all local police districts in 2017. The data relate to both the geography of the locations of ODSs drawn on maps, and also the physical characteristics of the locations, and the police tactics used. These data were subsequently expanded with data from two annual mappings of ODSs conducted in 2018 and 2019, which were used in Study II. For a detailed account of the data see Study I.

In Study II another new data set was created with a focus on gang activity. These data were collected via a survey of the regional intelligence department, which was focused on gangs in the region with links to ODSs. Study II outlines this data collection process.

Study III created new data in the form of the outcome of the RCT, using the control and treatment groups which formed the basis of the analysis. 144 cases were randomized and allocated to either the treatment or control group and then followed up to measure relapse into drug crime. This study also created data through its constituting the basis for a case study and a survey of the perceptions of police officers participating in the RCT. Study IV employs data from a survey of the police officers (N=25) who participated in the RCT, and examines their receptiveness and motivation to involve themselves in an experiment as part of their duties on the basis of 48 survey questions.

Data

In addition to the new data described above, the thesis also includes crime data, survey data on unsafety, data on transport links, and data on socio-demographic variables and gun incidents.

In Study I, crime data on outdoor violent crime as a category, in the form of assaults, threats, molestation and robbery, were used to examine overlap between ODSs and outdoor violence. Crime data on robbery, murder, prostitution, and

knife and weapons offenses were then used to examine the existence of different crime concentrations at ODSs. Responses from a survey of citizens' fear of crime (N=17,669) were also employed to explore the effects of ODSs in residential areas. Finally, data from the police on places labeled as vulnerable areas (N=25) were also used in the analysis.

In Study II, variables focused on employment, population size, housing, the proportion of young people and foreign-born individuals among residents were used to operationalize the social disorganization perspective and to reflect earlier findings based on similar variables. These socio-demographic data were also linked to crime data on narcotics offenses, bicycle theft, vandalism, theft from cars, offenses involving explosions, outdoor assault and assaulting a public servant. These data sets were already aggregated into a geographical vector-grid net, which was produced in connection with another research project at Malmö University (See Gerell, Puur & Guldåker, 2021).

Ethical considerations

None of the data sets employed in the thesis contained identifiable individual data. Study II has been approved by the Regional Ethical Review Board in Stockholm (Dnr. 2021-00205). Studies III and IV were approved by the Regional Ethical Review Board in Lund (Dnr. 2016/927). Studies III and IV are presented in a way that prevents any identification of individuals. Conducting research on police tactics towards offenders raises a number of concerns. In the studies included in this thesis, the focus has been directed at the police tactics and the implementation of the experiment, and not at the offender. The police tactics explored in Study III were already in place and are regulated in Swedish law and in regulations governing the work of the police. Police practice is further governed by the objectivity principle. The treatment given to offenders was not changed, but was employed randomly, and the number of motivational talks given to offenders increased during the weeks of the experiment. The absence of crime victims in investigations concerning drug use and drug possession makes these offenses easier to handle than many other crime types with regard to ethical considerations. The collection of data on relapse was conducted by the department responsible for the investigations of the original drug offenses included in the experiment, and the data were anonymized before being given to the researcher.

The police officers examined in Studies III and IV were all involved in the creation of the experiment, and were all trained in the relevant procedures, laws, and

duties, which also increased their competence. The results are all presented at the group level to avoid any identification of individuals, and all answers were collected anonymously.

The aim of improving the effectiveness of police tactics is important for the police, but also for citizens and offenders. It is of major value to create new knowledge on practices conducted within the police organization, and this demands research focused on individuals such as police officers and also offenders. In the field of evidence-based policing in particular, research needs both to focus on, and be conducted by, police officers in order to create meaning. The threat of reduced objectivity in this form of insider research is viewed as being outweighed by the added value associated with the officers' contextual understanding (Engel & Whalen, 2010).

MAIN RESULTS

The mapping of ODSs resulted in a descriptive analysis, an index of severity and a typology of both rural and urban open drug scenes. Study I found 48 ODSs in the Stockholm region in 2017. They were spread throughout the county and shared characteristics such as proximity to, or being located at, train stations or other communication nodes. Most of them were situated within residential contexts, but a few were located in business areas in the inner city; most had also been in existence and experiencing problems for many years. There was also crime concentration at these places within the region. For example, 30% of all outdoor assaults took place within the buffer zones (of 200m) of the ODSs. 65% of these places were also hot spots for violent crime, and 70% of the ODSs had at least one shooting in 2017.

The study also found links between the presence of ODSs and feelings of unsafety at the neighborhood level in the comparison of results from the fear of crime survey. This means that the issues relating to ODSs are public and affect people living, working, and moving around in these areas. The index created to measure symptoms associated with the ODSs, such as people avoiding the locations, public unsafety, and discomfort showed that just over 50 percent of the locations were associated with severe symptoms. Feelings of unsafety, shootings, and crime concentrations at these places constitute evidence of the major impact ODSs have on their surroundings. These places are stable locations of problems over time, and the small total area covered by the ODSs accounts for large proportions of the crimes recorded in the region.

The typology of ODSs shows that there are several different types of ODS in the region. Despite sharing many types of problems and characteristics, these locations differ in terms of area conditions, the physical environment, transportation

links, dealers, substances, criminal network involvement, levels of violence and measures of unsafety.

Table 3. Typology of ODSs.

	Type 1 City ODS	Type 2 Vulnerable Suburb ODS	Type 3 Suburb ODS	Other
Location	<i>Business/ shopping Communication node</i>	<i>Residential / local center/ train station</i>	<i>Residential/ local center/ train/bus station</i>	
Area	<i>Normal</i>	<i>Vulnerable</i>	<i>Normal</i>	
Unsafety	<i>High /Medium</i>	<i>High</i>	<i>Medium/Low</i>	
Crime	<i>Mixed nuisance, violent crimes</i>	<i>Shootings, murders violent crimes</i>	<i>Mixed nuisance, violent crimes</i>	
Clientele	<i>Mixed clientele Many heavy users Drawing crowds</i>	<i>Criminal networks Young clientele Local dealers</i>	<i>Mixed clientele Alcohol use</i>	
Substances	<i>All drugs incl. heroin, other opioids</i>	<i>Cannabis, cocaine, synthetic opioids</i>	<i>Mixed substances</i>	
Age of ODS	<i>Old</i>	<i>Old and medium</i>	<i>Mixed</i>	
Index	<i>Severe</i>	<i>Severe</i>	<i>Mixed</i>	
N=	6	18	12	12

The city-type ODSs are well-established and compared to the other types of ODS, which are located in residential areas, the city-type ODSs are located in more anonymous areas in business and transportation contexts. All types of drugs are available for sale at these ODSs and the dealers vary in age and background. Large numbers of people are present, both passers-by and active participants in ODS activities. Groups of youths and socially vulnerable individuals are drawn to these ODSs for excitement, community, and the drug trade. The vulnerable suburb ODSs are located at squares or open areas close to where people live and near to train stations. These ODSs are characterized by supplying a more limited number of drug types, mostly focused on cannabis, cocaine, and synthetic opioids. Dealers are young and mostly local, and criminal networks are involved in or manage the ODSs. These areas are exposed to worse violence, including shootings, and residents report high levels of unsafety. The suburb ODSs show

similarities to the city type in relation to substances, the presence of socially vulnerable groups, and general disturbances, but are similar to the vulnerable suburb type in terms of their residential context and their location as part of a local city center.

The analysis of the typology of ODSs showed that some of the ODSs produce worse effects than others, particularly as a result of varying levels of shootings, which are linked to higher levels of unsafety and which are likely to have a greater impact on residents, who have to deal with the problems on their doorstep.

The findings increase our understanding of ODSs and might be used when prioritizing resources and responding to the problems associated with ODSs, but also when seeking to initiate collaborations with other actors. Small areas characterized by high concentrations of crime might be a good place to allocate police resources. The typology shows that there are reasons to employ different types of interventions at different types of ODSs. While some places would be suitable for actions focused on abusers and youths in collaboration with health care providers, social services and parent organizations for example, others constitute more risky environments involving criminal networks and shootings, and are thus in need of actions focused on drug dealing, gun carrying and gang activities. The study suggests the need for a continued focus on the development of drug markets and gangs in order to facilitate better analysis and to stay abreast of tendencies regarding concentrations of gun violence and links to disadvantaged areas.

In the study (II) of micro places characterized by ODSs and gun violence, an overlap between the two was identified, with a tendency towards an increased concentration of gun violence between 2017 and 2020 within a 500m buffer area around ODSs. 37% of the gun incidents in the Stockholm region in 2017-2020 were identified to have been located within a 200m buffer area around ODSs.

Table 4. ODS Area, and the proportions of gun violence.

Area	Share of gun violence		Area	Area %	Grid Cells	
	N	%			N	%
ODS 200m buffer	185	37%	37 km2	0,6	1035	7

The presence of gang activity data was then used to categorize the ODSs and explore which ODS types accounted for the most gun violence.

Table 5. Overlap of gun violence on three categories of ODS.

	No gang	Gang	Gang rivalry
ODS	21%	28%	49% (1% missing)
Gun violence	2%	7%	27%

The overlap was specified on the basis of gang activity data, which showed a higher concentration of gun violence at ODSs with gang rivalries, which were found at almost 50% of the ODSs. ODSs with gang affiliations, but no gang rivalries, were not associated with the same concentration but had levels of gun violence that were more similar to ODSs with no gangs. The presence of gangs in the neighborhood was thus not by itself associated high levels of gun violence. This finding shows that data on gangs need to be explored more, and need to be clarified in order to better specify the occurrence of ODS violence, perhaps with even better precision than in this study.

Variables such as employment, assaults and over-crowded housing were used to predict where gun violence might be likely to be found in the future. The index of socio-demographic variables and crime was shown to accurately predict micro areas characterized by gun violence when the locations of recent gun incidents were compared with the predictive index. As shown in Table 6, 61% of the gun violence was predicted at 5.7% of the cells in the grid net.

Table 6. Calculation of three levels of prediction index values, gun incidents in 2021 and PAI.

	Predicted Cells		Gun incidents 2021		PAI
	(N=)	% of grid-net	(N=)	%	
Class red	93	0.6%	23	24%	40
Class orange	240	1.6%	16	17%	8.75
Class yellow	553	3.6%	19	20%	5.56
Total	886	5.7%	58	61%	10.7

The predictive index was imported to and visualized in GIS together with the recent gun incidents from 2021, see Figure 1

Figure 1. Grid cells in the northern area of Stockholm with the three highest levels on the gun violence index, medium (yellow), high (orange) and very high (red), and gun incidents recorded in 2021 by whether they lie within the predicted areas (blue) or outside these areas (black).

In the next step, the ODSs were used in the prediction of gun violence, and as can be seen in Table 7, they captured 57% of the gun violence incidents. By adding the ODSs as predictors of gun violence, a larger share of the gun incidents were captured, which means that areas of disadvantage might be used to forecast where gun violence will occur, but that including the locations of ODSs will help to further improve the accuracy of forecasting.

Table 7. Calculation of PAI for three categories of ODSs, and gun incidents recorded in 2021.

	Predicted Squares		Gun incidents 2021		PAI
	(N=)	% of grid-net	(N=)	%	
ODS without gang	279	1.8%	3	3.2%	1.8
ODS with gang	258	1.7%	14	15%	8.2
ODS with gang rivalry	479	3.1%	37	39%	12.6
Total	1016	6.6%	54	57%	8.6

The grid cells that overlapped with ODSs were added to the visualization and analysis, and as can be seen from Figure 2, they expand the relevant areas for gun violence prediction.

Figure 2. Area of Upplands Väsby, Stockholm with predictive index (Yellow-orange), with ODS (blue) squares then added, and gun violence (dots). The figure shows how the addition of ODS could help in predicting micro areas of gun violence.

Being able to specify which small micro areas have the most problem narrows down the areas that are most in need of interventions. This means that the police and other actors invested in drug-market interventions can collect and allocate their often limited resources to more specific areas and thereby enhance the efficiency of interventions (Weisburd, 2015). Which actions or tactics produce the best results in relation to ODSs still needs to be evaluated.

The RCT study (Study III) aimed at evaluating one tactic used at ODSs by police officers. The RCT showed that *motivational talks* held by police officers with drug offenders at ODSs may have had a slight but non-significant impact on relapse into drug crime after nine months, as shown at the first follow-up, but that this effect had disappeared at the second follow-up.

Table 8. Results of the first follow-up on relapse in drug crime in the two groups of the RCT.

Results at follow-up (9 months)			
	Relapse	No Relapse	Row Totals
Experiment	33 (36.22) [0.29]	32 (28.78) [0.36]	65
Control	40 (36.78) [0.28]	26 (29.22) [0.36]	66
Column Totals	73	58	131 Total
The chi-square statistic is 1.284. The p-value is .2571.			

Table 9. Results of the second follow-up on relapse in drug crime in the two groups of the RCT.

Results at follow-up (18 months)			
	Relapse	No Relapse	Row Totals
Experiment	41 (41.68) [0.01]	24 (23.32) [0.02]	65
Control	43 (42.32) [0.01]	23 (23.68) [0.02]	66
Column Totals	84	47	131 Total
The chi-square statistic is 0.061. The p-value is .8047.			

There were no significant differences on any of the variables examined between those who were given a motivational talk and those who were not. Nonetheless, a larger proportion of offenders in the control group were back at the ODSs and had been re-arrested for minor drug offenses at the first follow up at nine months, which means that the motivational talk may have had a short-term deterrent effect on those ‘treated’ with the talk. The overall results of this evaluation show that the time invested in motivating abusers to seek help does not result in any significant effect on relapse. However, doing the little extra required by an officer when registering minor drug offenses might help in the relationship with drug offenders, and might in the long run help abusers to seek help if the talks are conducted repeatedly.

Another result is the fact that the *motivational talk* is not conducted in the same way as the evidence-based motivational interview. The police version of MIs has been developed following a request to adopt evidence-based methods, but the original version of motivational interviews has not been implemented in police practice, but has rather been interpreted and adapted to a street-level tactic. Nor were the officers given any training in the tactic, but rather practiced what other experienced colleagues were doing. This insight meant that in order to conduct the experiment, all officers had to be trained in the same way in the use of the tactic, thus creating a common practice that could be evaluated. In addition to the results from the RCT, the experiment resulted in numerous insights regarding the conduct of applied research with street-level police officers. This was further explored in Study IV.

Conducting experimental research with police officers involves many steps and a great deal of preparation. In the process of conducting the RCT, the idea emerged to also conduct a study of police officers’ perceptions and evaluations of the research process in relation to the merging of research and practice. The RCT project was concluded with an anonymous survey focused on the participating police officers’ perceptions and feelings during the RCT period. These were

then analyzed and the RCT process was dissected using a pracademic lens and Sherman's (2010) guidelines for RCTs.

Three recurrent themes relating to the impact of the pracademic were identified in Study IV: (1) frustration as a door-opener to the practice; (2) credibility in the research team, and (3) the inclusion of an officer perspective. Finding settings that are ready to engage in research within the police organization will improve the possibilities of implementing results. One way of identifying such settings is to search for frustration. This argument is based on the idea that where employees feel frustrated a result of processes that are currently viewed as troublesome, they may be ready for something new. Moreover, in order for a police department or group to accept the research team, credibility is a key factor. The sense that the research team understood the police officers' work processes, encounters in the field, and regulations, made the officers receptive, and trust was established early in the process. Motivation to engage in experimental research in daily practice was created by encouraging the exploration and understanding of the frustration associated with existing routines. The threat that might be associated with the idea of science coming to evaluate the work of police officers was diminished by having a drug detective translate and communicate the scientific language. Thirdly, the inclusion of officers and the needs of practice were perceived as promising factors in relation to the facilitation of experimental research in police practice. The study concludes that the involvement of pracademic researchers may facilitate better communication between practitioners and police management, enhance evaluation, and improve the chances of changing police practice in a way that makes it more effective.

Analysis

Research on drug markets is rare in Sweden. No mapping of ODSs or drug markets has previously been conducted. The findings are new and the mapping of ODSs conducted in 2017 is being continued. The overlap between violence and drug markets has been established by other studies in the US, for example (Lum, 2008), but has not been explored in Sweden until recently. Adding the presence of criminal networks to the study also creates a new form of research on drug-market issues and different types of drug markets. The categorization of ODSs opens the door to more research on different types of drug markets in Sweden, and to studies evaluating different interventions used to tackle the issues associated with these different types of markets.

Using the ideas from social disorganization theory outlined in the theoretical section, ODSs might be a sign of disorganization in a given area that is in turn linked to bad living conditions and low levels of informal social control or collective efficacy in the neighborhoods. Hence, due to low collective efficacy these areas might have weaker defenses against the establishment of ODSs.

The locations in question might also inhibit characteristics that facilitate less risky activities, with hidden corners or dark passages, where surveillance and monitoring are difficult. Based on the concept of crime generators taken from crime pattern theory (Brantingham & Brantingham, 1993), and theoretical reasoning on land use, ODSs attract both potential offenders and targets to the areas in which they are located, but also outsiders, which both enhances opportunities for crime, and may thus be part of the explanation for the crime concentration found at these locations, but might also weaken informal guardianship (Brantingham & Brantingham, 1993; 1995). From this perspective, the ODSs may be driving the concentration of crime and the weakening of collective efficacy or local guardianship (thus impacting the level of perceived unsafety) via the inflow of non-residents to the area.

In the analysis of ODS developments based on data from the years 2017-2019, an increase was noted in the level of tolerance for deviant behavior at ODSs. The proportion of ODSs viewed as zones of tolerance for deviant behavior increased from 15% to 66% of ODSs during this period. Thus behaviors that occur at these locations are tolerated but would probably not be allowed to continue uninterrupted in other areas. This could be interpreted as a consequence of decreasing collective efficacy. In Study I, one type of ODSs was found to be located in vulnerable areas and to be associated with criminal networks. In the study (II) of the overlap between ODSs and gun violence, gang rivalry was shown to be related to higher levels of gun incidents. This could also be a consequence of low informal social control. Individual criminal propensity, linked for example to impulse control or substance use, might also play a significant role in gun violence, with affect, fear, and anger possibly leading to acts of violence in a given situation. These interpretations imply that strengthening both guardianship and collective efficacy could have an impact on ODSs.

Drawing on the concepts of RAT (Cohen & Felson, 1979), criminal gangs and organized crime often seem to consider the consequences of criminal actions, and do not want to draw attention to their business (Brantingham, Yuan & Hetz, 2021; Lum, 2009), which means that such activities might be prevented at these

locations by the presence of the police. Routine activity theory might fit those crimes that reflect rational behaviors, and it might thus help to assign more uniformed and surveillance police officers to drug markets, to encourage organized crime and gangs to withdraw, which would also affect the areas characterized by concentrations of gun violence and drug markets identified in Study II.

The link between gangs and gun violence was also found in the study of micro areas. Significantly worse social conditions were found in these locations in relation to most of the variables examined, showing a link between area disorganization and areas characterized by drug markets and gun violence. The focus of these results on specific parts of neighborhoods shows the police which areas should be prioritized.

Implementation of results in practice

Moving on to the lessons learned from these applied studies of ODSs, police departments from across Sweden have sent employees to attend lectures, focus days, seminars, and workshops focused on the knowledge about ODSs that was developed through these studies. There has been widespread interest in, and a widespread use of, the studies' findings.

In the context of the first study (I) of ODSs, the police started a regional ODS project together with other authorities and actors and entered into a four-year agreement on a drug prevention strategy with the goal of reducing the number of ODSs in the Stockholm region. This made the research findings important for the police in relation to their part of this agreement, but also led to other engaged partners using and disseminating the research findings. A Swedish-language folder was created in the context of a regional collaboration project, which presented ideas and facts on ODSs and on how to collaborate locally at these locations (Regional Stockholm Police, 2018). The folder contains results from the open drug scene study (I) and has been spread throughout the organizations involved in the collaboration (the Stockholm County Administration, Stockholm County Council, the prison and probation service, the customs service and the police) and to others. The folder was also translated into English following requests from abroad (Regional Stockholm Police, 2018). Within the collaboration on drug prevention in Stockholm, the next agreement, which will come into force in 2022, has also been focused on ODSs, with the goal of reducing the number of ODSs in the region. The focus on ODSs was determined and formulated at the level of police chiefs and municipal management, which means that the work has

a mandate from all the involved partners. The collaboration project constitutes part of a national strategy published by the government, and all regional projects are subject to follow-up, which means that all participating actors must document the actions taken and their effects, which ensures financing, resources and engagement in the project. Recently, drug prevention collaborations in other regions in Sweden have also decided to focus on ODSs, following the Stockholm project. The folder, experiences from the Stockholm collaboration, and research results have been requested by actors engaged in drug crime prevention in several other regions in Sweden.

In addition, the mapping of ODSs is now conducted as a part of the regional situation report produced by regional analysts. It has also been decided that the national collection of information on vulnerable areas conducted by all local police departments in Sweden will incorporate ODS mapping in their instrument, which will involve both national data collection possibilities and the digitalization of the survey method.

The knowledge on ODSs acquired by street-level police officers now constitutes part of the regional strategy on drug enforcement. Furthermore, the ODS research has been requested by national police departments responding to governmental inquiries, by BRÅ, when they were researching the drug market situation in Sweden, and by the European Monitoring Centre for Drugs and Drug Addiction, EMCDDA. This would suggest that the use of academics can also facilitate a reduction in the other gap presented in the introduction, namely that between practice and policy, or even political strategies.

The findings of the micro place study (II), highlights the link between gun violence and drug markets. Shootings were even more powerfully concentrated at ODSs between 2018 and 2020. Instead of targeting individuals, Weisburd (2008) found that place-focused interventions could target a higher number of crime incidents than a focus on individuals. These findings suggest that the best and most efficient crime prevention results may be produced by the police concentrating and focusing resources on stable, small areas. Since Study I showed that crime concentrations occur at ODSs, and Study II showed a similar concentration of gun violence at these locations, it seems fair to argue that ODSs would benefit from the dedication of crime prevention efforts to the small but most problematic locations identified.

The implementation of the results from Study II was initiated by presenting the preliminary results of the study to the Stockholm police chiefs, after which a report from the study was produced and distributed to all municipalities in the Stockholm region. The identification of areas with both ODSs and gun violence, and the results from the predictive model, provide a forewarning to policy and practice on what the future may hold. Predictive policing is an approach in which analytical techniques are used to identify spatio-temporal hotspots of crime in order to direct police resources to the right locations and then offer a suitable response (Ratcliffe et al., 2021). Study II constitutes a step towards the use of predictive policing. The implementation of results relating to other recent technical innovations, and the receptivity of police officers to these innovations, has been analyzed in relation to body-worn cameras for example (White et al., 2018). The usefulness and implementation of predictive results, such as those from Study II, needs to be explored thoroughly in order to create better practice.

As regards the RCT study, the abusers identified at ODSs often have long criminal careers behind them and commit offenses in order to support their abuse. The police could work more effectively against these individuals, whose activities produce high costs for society. In research on the economics of drug addiction, Nilsson and Wadeskog (2008) found that the most profitable measures are found in early interventions that prevent risk-taking from becoming more established forms of addiction. For a 20-year-old woman with active heroin abuse, the socio-economic cost amounts to approximately 10 million SEK. The cost of care for common healthcare combinations for a heroin addict varies between 300,000 and 2.6 million SEK. Care measures that are effective against abuse can produce savings of around SEK 2 million. If these care measures also allow the person to return to work, the savings can be 6 million SEK (SOU, 2011:35). The police only serve as a link to health care services in these cases, but if this link works well, it would be very profitable for society. In the evaluation of the time spent on motivational talks, answers were collected on how to change or enhance this link. These ideas and suggestions were then communicated to the strategic level. This information could be used when developing tactics towards ODSs.

One central result from the fourth study is the importance of identifying officers' needs and motivation, and acknowledging the craft of the policing profession, which is often ascribed negative connotations. Willis and Mastrovski (2018), for example, raise the criticism that there are signs that EBP overlooks the strengths and knowledge embedded in the everyday duties of police officers, referred to as

the craft. Advancing EBP requires paying attention to and including a focus on street-level police routines and police perceptions about new techniques. It is also important to focus on and follow the development of police practices. Succeeding with this detailed and specific translation work would be a positive step towards enabling policing research to bring about change in collaboration with policing practice. The fourth study describes the usefulness of pracademics for both research and practice. Highlighting these individuals and their roles will hopefully encourage the police organization and its staff to attempt to make better use of the dual skill sets present in offices and police squads in Sweden.

EBP of ODSs and how to get there

In order to accomplish the cost efficient and effective policing of ODSs and gun violence in Sweden on the basis of EBP, the first step would be to identify research results from tests conducted in this field by other police authorities or academic researchers (Sherman, 2013). Few studies have focused on the characteristics of open-air drug markets or ODSs, and even fewer in a European context, while no previous studies of regional patterns have been conducted in Sweden. The lack of research in the field of drug markets in Sweden creates problems for the police organization, even if the work of the police were to be based on EBP, since the research results needed to guide practice have been missing. The first studies presented in this thesis are now being used and will be serving as the basis for future enforcement and collaborative actions in Stockholm. The next step according to EBP would be for the police to conduct tests of its own if there were no research available, and to adopt the principles of Triple T (Sherman, 2013). This thesis has focused research on ODSs and gun violence, and has tested police practice at an ODS.

Applying the Triple T to the ODSs in Stockholm, there is a need to continue to closely track the development of drug markets. Secondly, the tactics already in use need to be tested, and new methods suggested by research need to be explored. Thirdly, attention needs to be focused on analyzing gun violence. Since the ODSs are public locations and have an impact on crime, they should constitute the center of attention even in relation to efforts to affect levels gun violence. The links between criminal networks and drug markets have been found in many studies, including in Sweden (BRÅ, 2021b), showing that these drug-trade locations are an important factor in the growth of gangs. Since many ODSs in Stockholm

have links with gangs, it is important to acknowledge their presence, and they could also be targeted by police efforts and collaborative actions.

An evaluation of police actions at two ODSs has been conducted by researchers in Stockholm involved in the STAD project (Stockholm Prevents Alcohol and Drug Problems) (See Feltmann et al., 2021). Hopefully more initiatives will follow. The focus needs to be directed at the locations with the most problems, i.e., the areas of overlap between gun violence and the drug trade. The physical presence of police officers who can engage with those on and around the drug markets in an insightful manner would constitute a start, with step two being to observe trends and create networks of actors. The relevant actors will vary between locations due to the different categories of ODSs, levels of gun violence, and available resources. This will lead to the development of different types of teams with different sorts of knowledge and methods. Nevertheless, all the actions taken need to be properly evaluated using scientific standards in order to advance policing methods and reduce the impact of ODSs.

The actions taken will depend on high-quality analysis of the ODSs, which would benefit from better data, such as detailed gun violence data and assault data that clarify what types of drug may be associated with specific types of violence. Data on violence from other actors, such as the ambulance service and hospital data, would also improve the level of reliability. Better analysis requires the continued mapping of drug scenes throughout Sweden to facilitate comparisons and to follow developments in both rural and urban areas.

In order to improve analyses, the training of police officers in geographical analysis and GIS programs would, with a little effort, lead to the improved utilization of local data and improved knowledge at the department level, instead of having to wait for regional statistics or situation reports produced higher up in the organization. This would not only create better local knowledge and analysis informed by local experience, but would also generate appropriate regional and national reports and better possibilities to produce employee-driven development, which also fits well with the new policing philosophy in Sweden.

The problem that then remains is that of the failure to make use of existing knowledge and research. To develop a learning police organization, results must be utilized and there must be an interest in police research. The evidence-based ideology has to be accepted at the top of the organization in order to create an EBP mindset and EBP practice, policy, and methods (Martin & Mazerolle, 2016).

There need to be structural incentives, initiated by senior management, to encourage leaders and chiefs to strive to develop evidence-based policy (Sherman & Neyroud, 2011; Piza & Welsh, 2021) and to have the courage to create academic career paths within the police organization. Police officers also need to be pushed to understand, read, and use research in their professional work. Police officers could support this change and develop their interest if research were to be conducted in their everyday practice on the basis of explorations of officer perceptions and efforts. Science can be used to communicate between practice and policy from both sides. The research projects should be located at the center of the organization and should involve pracademics, since these are able to manage both practice and the translation of research, as well as working to translate between the policy and ‘stakeholder’ levels (Braga, 2016).

Pracademic impact on research

There is a dual interest in the findings from the studies presented in the thesis. The link to the needs and understanding of practitioners means that the findings are of interest to both practitioners and research. Conducting research close to practice undoubtedly affects the entire research process and also the outcome. Several issues noted in policing research, such as an imbalance between academics and police practice, the identification of research questions that are relevant to practice, and adequate methods to address these questions, and the lack of engagement with science among police organizations (Bradley & Nixon, 2009), are all addressed via the position of the pracademic. The research questions examined in this thesis are all based on a practitioner perspective. In addition to the pracademic perspective having guided the choices made, all of the studies have involved police officers. The choice of questions rapidly narrowed the methods that could be employed and also the results that it was possible to produce. However, the utilization of research findings will be greatly expanded if these findings are of interest to and meet the needs of practice. The contribution to policing research made by pracademics is shown in the success associated with central pracademic figures in the field of EBP, such as Professor Cynthia Lum and Dr Peter Neyroud. One could also argue that the Cambridge master’s program in policing is creating and spreading pracademics across the world.

Police research and criminology will acquire more credibility if practitioners and policy make use of results and engage in research projects. If research is employed and leads to better police practice, then the marketing of research will take

care of itself. The gap between research and policing practice will be minimized if there is a willingness to involve research in the development of practice. If the needs of practice and the needs of research are translated correctly, willingness will not constitute an obstacle, and the pracademic is well-placed to help in this translation process (Huey & Mitchell, 2016). At the start of the RCT experiment, the study had to be described and explained to the police officers involved, and the large number of questions that arose in response to this had to be addressed. These processes were anticipated and prepared for, and adjustments were made to translate the form and requirements of the research to meet the needs of practice. This led to the practitioners being ready to embrace and conduct research at the core of policing practice, and produced research results that are not only useful for police policy but also for police research, both on the conduct of RCTs in the field and on motivational interviews. Finally, it can be mentioned that no RCTs have previously been conducted in policing practice in Sweden, and this project will hopefully influence more researchers to design and execute RCTs focused on policing.

As regards the effect on ODS research, the choice of a pracademic and EBP perspective has opened several doors. It has been a door-opener to conference participation and the presentation of the research within academia, but primarily to the possibility of disseminating the research outside academia. Proposals and requests from many different authorities, companies, and organizations have been sparked by the connection to practice. This expands the audience for the research and means that the research results will reach more people, increasing the potential for the findings to have an impact.

DISCUSSION AND FUTURE DIRECTIONS

This section will raise the perspective of both the pracademic approach and the ODSs. It will first discuss pracademic contributions to the police organization and to research, before moving on to discuss the findings concerning ODSs in the context of disadvantaged neighborhoods. It will also outline suggestions for future research and practice related to both the pracademic approach and ODSs.

Pracademic merging

Drawing on evidence-based medicine as the role model for EBP, Swedish EBP needs to be related to the Swedish view on clinical expertise and the concept of ‘proven experience’ (see Dewitt et al., 2021). In the regulation of Swedish health care, clinical expertise and judgements based on experience have a history of being given equal weight alongside science (Persson et al., 2019, Patients Act 2014:821). Practitioner knowledge is viewed as supporting, complementing, and utilizing science, and thus as being epistemic (Dewitt et al., 2021). To succeed in improving police practice through EBP in Sweden, both science and ‘proven experience’ are needed, and the key is the combination of the two. The pracademic might not be the most advanced academic nor the most specialist practitioner, as is argued in Study IV, but the pracademic’s strength lies in the combination of skills and perspectives. The pracademic could be compared to a biathlete, whose success is due to a combination of skills. The EBP paradigm in Sweden still has a long way to go, but the country has no EBP society, and policing research is scattered across many different research networks and contexts, as was described in the introduction. In the studies presented in this thesis, there are several factors associated with the pracademic perspective and role that have been fruitful. As a

result of the pracademic researcher's experience of the police organization and the reality of policing practice, the skepticism of practitioners towards research becomes easy to understand and might therefore be easier to overcome (Braga, 2016).

Merging the pace of research and police operations

The development of ODSs and gun violence in micro areas identified in Study II needs to be addressed urgently, and on the basis of the best available evidence-based methods. Here the differences in the pace of police practice and research need to be addressed. Research is time consuming, whereas policing often needs to react quickly (Laub & Frisch, 2016), and policymakers are required to make instant decisions (Braga, 2016). Informed decisions are preferable, but are far from being the norm (Laub & Frisch, 2016). One issue that has been identified in relation to this is the the interpretation of research and its sometimes contradictory results, which might put leaders and practitioners in an impossible position if they were expected to stay up to date and follow all research results. The outcomes produced by initial research have been found to differ from those found in subsequent studies, as was the case in the Minneapolis trial, for example (Sherman & Berk, 1984; Sherman, 1992). This raises the question of how much the 'evidence' produced by the results of a first-time study is worth. Do studies need to be replicated to produce more solid evidence? If so, how many replications are required? How long can practice wait for research results? Replications of studies also show different results in different contexts. How much research is actually generalizable to different police authorities or even different departments? If policy is based on evidence, it also needs to be able to change alongside the growing scientific knowledge (Sherman & Cohn, 1989).

The pracademic might be a part of the solution to overcoming the problems associated with the differing pace of research and policing practice. The many policing operations in which decisions are made every second, and where the stakes involve both people's lives and large amounts of money, are still often based on experience and experience alone. Waiting for research might not be possible or even appropriate (Braga, 2016). Police officers on the street have a great responsibility to be able to take operative decisions in a matter of seconds that have considerable consequences and that impact on people's lives. This sense of duty permeates the operational soul of police organizations, which is based on being fast and reactive. Still, research-informed strategic decisions and policy need

more time-consuming preparation and should not be mixed with the pace of reactive operations. The pracademic knowledge of the routines, processes, and hierarchies within police organizations makes the research process smoother and faster (Braga, 2016). Incorporating research as an important part of policing mitigates the need to engage in the slow process of identifying internal, external and contradictory perspectives, and analyzing and often even reanalyzing the data and results reported by research.

However, using research in policing is also a process of learning while doing. A great deal of learning takes place while participating in an experiment for example, regarding both issues that are relevant to practice and how research works, as is shown in Studies III and IV. Braga (2016) has highlighted the role of strategically placed sworn police pracademics as important enablers of organizational learning within police agencies through their research initiatives.

High quality methods and the results of structured analyses should constitute the guideline and basis for practice and policy (Sherman, 2010; Sarnecki, 2019). Many reports and analyses are produced within police departments whose contribution is limited in terms of its scientific value, but which nonetheless form the basis of strategies and policy (Sarnecki, 2019). Much of the evaluation and steering of police authorities is still based on statistics such as clearance rates that say very little about police effectiveness (Sarnecki, 2019; Axnäs, forthcoming). There are many different measures that could be employed to this end, but at present, measures such as the number of investigations passed on to the prosecutor for assessment continue to steer the work of many departments (Axnäs, forthcoming). Nonetheless, the communication between decision makers and analysts also requires attention focused on ensuring that those who create the basis for decision making are asking the right questions. Pracademics might identify other measures that provide a better picture of reality (see Axnäs, forthcoming). Pracademic knowledge could help the police organization to more efficiently meet the needs of ODSs and gun violence by tackling the problems associated with the pace of research and practice, by analyzing developments, by enabling learning in the context of research, and by improving measures focused on police practice.

The pracademic reach

Sherman and Neyroud (2011) have argued that the police should take ownership of police research and work to build research into police organizations. The movement within EBP towards police-led science requires a new organizational

structure that tips the hierarchical pyramid that currently exists in most police organizations towards a more dynamic organization (Hunter, May & Hough, 2019). The reach of pracademics' knowledge extends beyond their own research projects. Since pracademics are familiar with the culture of the police organization and its tacit knowledge (Levander, forthcoming), they are able to direct communication and the translation of research to the right levels within the organization, in the right format, and in a way that is adapted to the relevant audience (Piza et al., 2021). Study IV showed that the credibility associated with being a practitioner in the policing field had an impact on the opportunities to open up departments to other perspectives and to research. There are many answers to be found within police practice and routines that would benefit research and make it relevant and helpful (Levander, forthcoming). Pracademics also know where the organization is falling short and not delivering what it is supposed to. Research may lead to the development of healthy self-criticism and insight into shortcomings within the police.

Policing scholars have suggested a role for police pracademics in various ways since the early developments of the EBP movement (Sherman, 1998; Huey & Mitchell, 2016), and Piza et al. (2020) have suggested that their presence should be complemented by also embedding criminologists and crime analysts in the police organization. Police pracademics may serve as a useful means of increasing the number of criminologists embedded within the police organization, and of improving collaborations with academia. A number of problems have been identified in relation to the establishment and maintenance of collaborations between police and researchers (Tompson et al., 2017). Among other things, there appear to be trust issues and a lack of knowledge about academic organizations (Rojek et al., 2015; Crawford, 2017). In this regard, the insights that police pracademics have into academia may serve to decrease the skepticism and help align police departments with the research community (Braga, 2016) by overseeing agreements, partnerships and collaboration designs.

Another contribution that pracademics can make involves their understanding of police data on the basis of both experience and academic knowledge (Braga, 2016). Police officers know how these data are produced and what might lie behind the statistics. Knowing the missing links and the differences between the data and the reality they are sometimes mistakenly viewed as depicting constitutes an evident source of knowledge that may help to advance police research (Braga, 2016). The interpretation of police data requires the experience and

knowledge of police in order to be accurate, and asking academics for help could serve to strengthen and validate research. The research perspective, on the other hand, facilitates the utilization of the massive amount of data produced in police practice and will also help to produce the data needed for improved analyses.

Weisburd and Neyroud (2011) have argued that to establish a police organization that follows and makes use of research findings, police research also needs to be introduced into and used in police training programs. In Sweden, the basic police training program has been delivered by universities since the year 2000. The five universities involved are Umeå (since 2000), Södertörn (since 2015), Linnaeus (since 2001), Borås (since 2019) and Malmö (since 2019), with a few also offering additional advanced courses in policing. The basic police training program (at some of the universities) includes literature on EBP and applied criminology. It has been noted that an increased number of EBP lessons need to be added to the program. The next step would then be to implement police science as research field in its own right in Sweden, and it would also be useful to have police academic PhDs teaching translational criminology.

ODS context

In order to target ODSs and the issues associated with them, we need to understand the context in which they are situated. On the basis of the work of Wikström and Sampson (2003), ODSs may be viewed as parts of the criminogenic environment in which there is a higher tolerance for criminal activities. In this regard, the areas characterized by both ODSs and gun violence constitute the worst contexts. Research shows that the context in which children grow up and spend their time will affect their future lives. For example, effects of the occurrence of homicides in a neighborhood include a deterioration in school results among local children (Sharkey, 2010) and also a decrease in impulse control (Sharkey et al., 2012).

The values found in these locations are influenced by the individuals who are present, and the locations may be criminogenic if participation in the drug market is viewed as 'normal'. If socialization practices are linked to community routines, and if these differ due to differences in resources (levels of disadvantage) and rules (collective efficacy), as suggested by Wikström and Sampson (2003), then the maintenance of an open drug scene by gangs of youths in certain micro areas could be viewed as a routine in itself.

Violent micro-culture

Culture might be added to further explain ODS effects, such as gun violence linked to gangs. Returning to culture as an explanation of deviant behavior, as discussed in the theoretical section, the concept can be applied both to the increase in gun violence and the stability of drug markets in Stockholm. Kornhauser argued that the use of the culture concept to explain deviant behavior has not been useful (Kornhauser, 1978). Values supporting criminality are not found in the entire population in these areas, and the impact of culture would therefore be limited (Kornhauser, 1978). However, although cultural explanations may not help in understanding neighborhood-level deviance in general, the development of values or cultures in smaller areas may nonetheless constitute part of the explanation of violence, gangs, and gun violence in some parts of Stockholm. Brantingham and Brantingham (1999) view places as generating crime in terms of several dimensions, of which culture is one. Lum (2008) has emphasized the existence of cultures that allow violence and cultures where violence is prohibited in order to avoid attracting the attention of the police. An even greater focus has been directed at culture in Anderson's (1999) work on "the code of the street". A culture of tolerance for criminal norms constitutes a basis for explaining why gangs may take over certain areas. The increase over time in levels of tolerance found in the analysis of ODSs in Stockholm may be linked to the establishment of gang values. The exclusion and isolation produced by residential segregation could be seen as creating a need for a feeling of community or group-belonging with others in the same situation.⁴

Another factor affecting outcomes is found in the lack of institutions that maintain informal control via 'good values'. Sarnecki (1997) has advocated micro-level analysis of the links between youths and has discussed the development of stronger horizontal bonds between peers as a possible new youth culture, which is filling the gap produced by a lack of parental or adult controls on young people (Sarnecki, 1997; 2001). This culture, he argues, is often in conflict with the conventional cultural norms of society. It is not unreasonable, like Sarnecki, to look back to Sutherland's theory of differential association (Sutherland, 1939), or to other learning theories, in order to understand how an oppositional micro-culture

⁴ It can be noted that other types of crime, which may be characterized by quite different patterns of geography and social structure, could also be understood on the basis of similar reasoning, such as breaches of tax regulations, with these offenses also perhaps being related to a culture of tolerance in different societal groups.

might well logically be formed through interactions with similar peers exposed to the same level of exclusion, racial discrimination, alienation, and hopelessness (see e.g. Anderson, 2009; 2020) in some areas of Stockholm.

Based on individual perspectives, theories such as Hirschi's theory of social bonds (1969) raise the importance of the control in relations that is generated by integration in society. Social mechanisms such as *attachment* to and *participation* in society are believed to protect individuals from starting to offend. Social bond theory suggests that integration in societal activities and relationships protects youths from engaging in criminal acts, and having a close and honest relationship with an adult (attachment) may be what protects an individual from committing offenses. Studies show protective effects of having adults to trust and to look up to (Lösel & Farrington, 2012). Weerman et al. (2015) founds relations to parents, friends and school to be important to youths' propensities to engage in gang activity. An improved relationship improves individuals' chances of leaving a gang (Weerman et al., 2015), which indicates that we might expect a positive effect from engaging parents and school to more closely connect with youths.

Integration into the 'good' society poses a problem to those who grow up in areas with higher number of offenders, and where offenses are openly committed at drug markets on a daily basis, creating an alternative norm and moral code in their home environment. The normative values of society are further away and harder to reach, and it could be argued that the threat of homicide on the streets intensifies this process. There may well be integration, although not into society at large, but rather into deviant values in the local area. Anderson (2009) describes the values and behaviors of the immediate context as being inherited, and argues that it is the local code that leads to individuals committing offenses and carrying guns. The code is built up via the conditions known to characterize socially disorganized areas, such as unemployment and poverty, but with an added dimension involving racial discrimination, alienation processes, hopelessness, distrust of the police, and violence. The conflicting culture that emerges from this has a logic, in that it 'saves' some young men from losing face, and explains gun carrying as a means of protection against being shot in a context where the community is unable to ensure individual safety.

The effect of collective efficacy on crime is based on the notion that people will not interrupt illegal acts or take part in the exercise of informal social control if they lack a common strength. In some of the micro areas within the neighborhoods that have experienced the most negative developments in Stockholm, some

people might even be supportive of the deviant behavior, not lacking but rather sharing a common strength that is on a collision course with the rest of the neighborhood or society large. These small micro areas and their micro cultures may only contain a few individuals and be applicable to small areas such as a block, but they may be viewed as being in opposition to the Swedish rule of law and as acting against it. Similar blocks or micro areas might also exist in other neighborhoods.

Regardless of the concepts, perspectives, or theories one might favor, the normative impact of power structures on behavior is of importance to both explaining and changing the incentives for violence, gang membership, and homicide (Papachistos, 2009; Gould, 2003; Anderson, 2009). Much violence could be explained by the perceived need to maintain face and improve one's social status, which makes the reproduction of macho culture a part of the problem. When looking at the problems associated with drug markets and gun violence, the neighborhood context is not only of interest with regard to inequalities in the social safety net and in quality of life, but also in terms of variations in the influences that affect the formation of norms and goals. Questioning and breaking down the values that dominate such contexts is of major importance in tackling the violence and parallel culture associated with gang status. The combination of gang activity impacting socialization and a high propensity to commit crimes, coupled with the lack of a parental presence as a result of many single parent households, and schools that lack sufficient resources, further exacerbates the impact of the disrupted neighborhood context. In the best of worlds, those areas with the highest number of individuals with a high offending propensity would have the most well-functioning socialization context to make up for these shortcomings, but the opposite is the case in many of the areas where we can see stable drug markets and high levels of shootings in Stockholm. This systemic problem is one of the reasons that have allowed the negative developments to occur, and is thus something that needs to be changed. Thirty-five years ago, Wilson (1987) described the links between criminal behavior and a lack of access to opportunities and influence. There is an inbuilt problem that is being continuously reproduced in disadvantaged areas around the world based on exclusion, which is associated with ethnicity in many places. Changing the conditions that are producing this segregation and poverty would require a spatial redistribution of resources (Scarpa, 2015). An ODS might constitute the tip of an iceberg in a certain area, and there are reasons that it has proven so difficult to disrupt open drug

markets. Nevertheless, understanding them in a wider perspective also provides insights into how we might develop better means of taking action against them.

Pracademic Translation into action

Translation into improved targeting

To target the range of issues associated with ODSs in the Stockholm region, tailoring interventions based on the characteristics of the ODSs would be one way forward. The categorization of ODSs presented in this thesis is in part based on the characteristics of their locations, but also on the participants and the effects they have on the surrounding area. This categorization of ODSs could be used in the development of interventions. Rational choice theory (Cohen & Felson, 1979) and crime pattern theory (Brantingham & Brantingham, 1993) can be viewed as similar in their focus on the opportunities to commit crime. On this basis, situational prevention (Clarke, 1995) constitutes the approach required to tackle the problems. Depending on the type of ODS, interventions could be designed to meet the different situational settings. In addition, on the basis of the POP perspective, it would seem to be appropriate to expand the use of the concepts of environmental criminology, such as place analysis, situational crime prevention, and crime mapping, to local police departments in order to improve the systematization of problem formulations. Different types of drug-market interventions need to be developed and evaluated based on the type of ODS in question, in terms of both the findings from Study I and the level of gang activity, as described in Study II. Due to the contagious nature of both gang criminality and gun violence described in many studies (Brantingham, Yam & Hertz, 2021; Green et al., 2017; Papachristos et al., 2015) the response from the police, and interventions focused on these ODSs in general, need to be swift in order to interrupt the process of contagion (Skogan et al., 2009; Webster et al., 2012; Tremblay et al. 2020).

In order to further enhance the targeting of problems associated with ODSs, it would be possible to utilize the systematization provided by the crime harm index. The effects of the gun violence and homicides in public spaces, and of the presence and density of criminals and gangs at ODSs, are severe. Researchers involved in crime harm index (CHI) development (see e.g., Sherman et al., 2016; Rinaldo, 2015), which focuses on the harm produced by different types of crime in order to measure and make judgements prior to the allocation of resources,

would surely agree that the major harms associated with this public and lethal combination of crimes constitute grounds for prioritization. An ethical and cost-effective prioritization of locations is now needed (Neyroud, 2019), and the statistical CHI method would be useful in this field. This addition to crime concentration ideas could narrow down the range of locations subject to the worst effects, and CHI research focused on gun violence and drug markets would enhance our understanding and the resource allocation strategies of police departments. Furthermore, there is a difference in the extent to which crimes are recorded by different agencies, such as ambulance services, fire departments, and the police. Developing ways to better combine and compare these data would enhance research. Data from the ambulance service, health care and calls for service would allow for a more reliable analysis than police crime data alone.

All relevant agencies and actors must help to fill the vacuum of protective factors if we are to avoid gun violence and drug markets spreading further and becoming more well-established. Involving parents is today being emphasized in Sweden as a way forward in the form of early intervention strategies focused on youth deviance. The focus on parent involvement is crucial for many children and youths. Helping parents become better parents via social services measures, or involving other actors that are present in the everyday lives of young people, such as school staff, might help turn adolescents away from criminal behavior. The police cannot create access to employment or improve the housing situation, but being present at the locations that are worst affected means also engaging actors from communities, municipalities, health care, schools and so on to participate and be a part of producing alternative activities characterized by a different set of behaviors and values than those that are currently being reproduced in these locations. An important notion both in this thesis and in the research more generally is that even in socially vulnerable areas, most young men do not participate in the drug market despite the presence of so many risk factors. Future research could add a great deal of insight by focusing on expanding the knowledge on protective factors in order to strengthen resistance to drug-market activity, gang criminality, and gun violence.

In order to better target youths at risk of becoming involved in serious crime, social services could benefit from policing knowledge. One prevention perspective is based on decreasing exposure to criminogenic environments, with Wikström and Treiber (2017) advocating keeping track of youths and helping them to avoid these locations and participation in criminal activities through the

presence of adults, and by encouraging participation in alternative activities. The social services constitute a central actor at criminogenic locations and in the creation of other, 'better', environments in such areas (Wikström & Treiber, 2017). It has also been established that as individuals become older, the influence of the residential neighborhood area on the individual declines in favor of that of environments that lie further afield. As Wikström and Sampson (2003, p. 133) have noted, "the impact of community context on individual development of self-control and morality (propensity) is likely to fade with age". This makes a difference to the prioritization of prevention activities in terms of which areas should be supported and focused on first, i.e., those with the largest groups of impulsive, deviant, adolescent boys, and the lowest levels of informal social compensatory factors, such as parental presence, well-resourced schools, and law-abiding peers.

Childhood deviance, and also parental deviance and dangerous contexts, need to be continuously reported to the social services by the police in order to identify those families in need of acute support. Since research shows that childhood deviance is strongly predictive of problems later in life, it is most effective to address the earliest, youngest offenders. Following the concept of the 'power few' (Sherman, 2007), identifying the few at risk of becoming the most active and violent offenders might have an effect. Studies of gun violence also show that gun carrying is predicted by an early debut in drug selling (Docherty et al., 2020). This prioritization of measures is something that police departments could help the social services to achieve. The legal criteria that form the basis for decisions on youth intervention need to be reached in order for the social services to take coercive measures or choose the right treatment. Police working to combat crimes such as drug dealing and gun violence have information about these criteria with respect to children and families. This information needs to be translated into the right language to affect the decisions of the social committees responsible for these children.

Translation into Testing and tracking of Hot spots policing

Micro-place focused hot spots policing is another suggestion for the police. There is reason to focus research on small micro places at which large proportions of crime occur (Weisburd et al., 2012) and also to focus prevention on small and stable hot spots (Braga & Weisburd, 2010). The hot spots policing method is based on the deployment of police patrols to places at which a high density of crime has previously been identified. The places of interest are based on the

results of spatial analyses of crime. The effectiveness of crime prevention through hot spots policing is based on the theoretical ideas of deterrence and reducing the opportunities for crime (Braga & Schnell, 2018). Since 1995 (Sherman & Weisburd), hot spots policing has been evaluated repeatedly, with findings showing that when implemented correctly, there is significant evidence of crime reduction at micro places with no displacement (Bowers et al., 2011; Braga et al., 2019; Bland, Leggetter, Cestaro & Sebire, 2021). Predictive policing and hot spots policing are strongly related if predictions are focused on the locations of crime (Eck, 2019).

In this thesis, micro places associated with both drug markets and gun violence have been mapped and predicted. The ODSs are well-defined and the analysis of the problem is developed. These locations are in need of many things in order to reverse the negative developments and help residents tackle the many effects of drug markets and gun violence. ODSs are locations of both gun violence and concentrations of other types of crime, as shown in Studies I and II, and are also useful in the prediction of future gun incidents, as shown in Study II, which would suggest that ODSs constitute a suitable target for prioritization in relation to hot spots policing. The use of patrolling resources to implement hot spots policing at all ODSs would appear to be a reasonable investment of time. Swedish evaluations of hot spot policing are underdeveloped, and there is no evidence of specific effects on drug markets in Sweden, which means that as a first step, this needs to be made a part of policy. Training in the method and its practice is also required. The method then needs to be tested and its effects need to be measured. Comparing drug markets to other crime hot spots has a number of implications. ODSs are specific locations of drug offending, despite also being characterized by concentrations of other types of crime, which means that individuals visit these locations as a result of the drug trade. If one ODS is ‘disturbed’ by the presence of police officers, abusers and dealers might move to a neighboring ODS. Displacement to other ODSs must therefore be explored.

Hot spots policing is evidence based, but nevertheless needs to be implemented in a strict form that follows recent research results. Moreover, it needs to be tracked, for example using GPS-based evaluations and the tracking of police efforts. In addition, a way of extending the reach of police controls would be to also make use of CCTV, which has been evaluated in relation to drug-market problems and found to have positive effects in reducing and eliminating ODSs in Sweden (Kronkvist, Nordqvist & Ivert, 2019). Combining the use of CCTV cameras

and hot spot policing has alternatively been found to have both crime-reducing effects (La Vigne, Lowry, Markman & Dwyer, 2011; Piza et al., 2015) and to lack any significant effect (Brå, 2014). The combination of CCTV and hot spots policing might also be a way of extending the learning of police officers who are able to see what happens when the police patrol hot spots in this way. Developing tactics to follow and counteract the actions taking place at these locations in the context of hot spots policing might streamline enforcement at ODSs and other hotspots even further.

Translation into improved principles of policing

The goals of EBP and of the policing of drug markets need to be revisited. In the recent developments of the EBP model, which have been termed *second generation EBP* by Weisburd et al. (2017), the aims of the what works paradigm also include wider adaptations of policing tasks beyond policing being based on scientific evidence (Sherman, 1998). A step towards an expanded methodology also ends up in expanded amounts of results showing expanded expectations of the police (Piza & Welsh, 2021). This connects to the formulation of POP, in which Goldstein (1979) has emphasized the problem of losing sight of the ultimate goal of police work. Viewed from this perspective, police enforcement is a tool for solving problems. Arrest and seizure are not goals in themselves but combine to form the means to a greater end. In the case of disadvantaged areas characterized by drug markets and gun violence, a redefinition of the nature of the problem might help to redirect enforcement and collaboration efforts to address what is identified as being the most important problem to solve. This could be the way to identify new tactics and partners in the work focused on ODSs. One suggestion to improve the chances of achieving the ultimate goal of the police might be to focus less on measures such as arrests and seizures, and to focus more on decreasing the level of open gang activity, decreasing harm, and improving levels of safety.

In addition, a focus must also be directed at the way in which policing is implemented. The vacuum of informal social control, or low collective efficacy, that is found in many areas needs to be resolved before transformative mechanisms such as gang membership or drug-market culture become the norm at an increasing number of locations. Police officers are going to be among those exercising control in many of these areas, and thus have a major responsibility to do this well. The content used to fill these voids needs to be politically up to date, correct,

clear, well-communicated, consistent, and inclusive. With regard to the police and the identification of possible keys to improved practice, there is reason to recruit employees who are representative of the population in terms of gender, ethnicity, and sexual orientation. In addition, all police officers and chiefs need to be well-educated in criminal justice and discrimination in order to improve their contacts with young individuals on the street. The four elements of concern for fair policing are that the police include the *voice* of the public, base their decisions on *neutrality* and *respect*, and have trustworthy *motives* (Tyler & Meares, 2019). One way of tackling these aspects is to track empirical evidence from the model of procedural justice policing, which advocates that police actions should be influenced by public trust and an understanding of the fact that public perceptions are affected by the way in which the police exercise their authority (Tyler & Meares, 2019). Furthermore, critics have noted that it is important to understand *when* the police should exercise their authority (Thacher, 2019). Although there may be a lack of empirical support for several of the effects often associated with procedural justice policing, the social value of a procedural justice approach on the part of the police nevertheless adds an important normative aspect to policing, especially in disadvantaged areas (Nagin & Telep, 2020). Tankebe (2019) has identified a relationship between external and internal legitimacy. Masculinity-coded professions such as the police need a deep understanding of diversity and to reflect on the values they should be protecting (Rennstam, 2021). Changing and influencing the macho ideals present in certain micro-cultures might be a task for a wide range of actors, but the police have a responsibility to represent all citizens. Research shows major negative effects of hierarchical structures and of physical ideals associated with workers such as the ideal of the macho police officer (Loftus, 2008). However, there is also an established criticism regarding the oversimplification of the ‘macho police officer’ described in the research (Reiner, 1992; O’Neill & McCarthy, 2014). Nevertheless, as has recently been debated in the media, police organizations were also included in the #MeToo movement across the world, under the hashtag #PoliceToo, with Sweden being no exception, #Nödvärn (Bjurmark & Dejemyr, 2021; Expressen, 2017). If the police are to succeed in reaching residents and being regarded as legitimate, improving the internal culture of the police constitutes an important part of dealing with the expectations others have of police behavior and at the same time managing the police’s exercise of power. Such an improvement of the internal culture of the police is here proposed to constitute an important aspect of all the methods and perspectives used by the police. As has been noted Rosenbaum (2019), for

example, in order to be effective, hot spots policing needs rethinking in terms of police officers' education, procedural justice, and racial bias.

Limitations

Data and methods

Firstly, it is fair to note that crime data are not representative of criminal activity, since much crime is not reported to the police. The crime data used in many studies share problems regarding the reporting of crime locations and the underdevelopment of GPS (See Gerell, 2018). There are problems related to the non-reporting of crimes and developments are needed in the production and use of data within and outside the police.

The ODS is a central concept in this dissertation. To start with, the definition and collection of data on these locations must be problematized. The definition demarcates the locations spatially and temporally, and separates them from other locations in terms of their effects for the police and society. The definition does not include any limitation on the size of an ODS, which led to the creation of a data set that includes varying types of areas. The choice of not limiting the size was mainly based on the idea that these locations might vary due to the nature of the buildings and land use in a given area, but was also linked to the aim of identifying all established drug markets in the region, irrespective of variations in size. The size of the markets was, however, one of many variables included in the survey, and was considered important and as a possible basis for categorizing the ODSs in the region. The size of the ODSs included in the dataset varies, but not to an extent that would have made size a useful basis for categorization purposes. The ODSs have also been drawn with varying specificity with regard to the boundaries of their locations. Nonetheless, the data regarding these locations has shown them to be stable (with most of them having been present for over five years), and also to be comparable across different ODSs, which has also been found in the recurrent annual mapping process. The data collection procedure included communicating with the local departments that were reporting the ODSs. The reporting of ODSs by police employees might also pose questions of objectivity. This has already been discussed in the methodology section of this thesis, and the ODSs are believed to constitute well-known, established locations that would be almost impossible to invent or manipulate, since they are identified in collaboration with municipalities, and their reported locations are based on the

situational reports reported to the regional and national levels, and most importantly, they are central locations for policing in the region. The aim and scope of this study has rather been to identify regional patterns, and to categorize and explore the characteristics of these locations, which are already known at the local level. The drawing of the locations in GIS required the police departments to carefully demarcate the areas, and the survey required police departments to collect information on the ODSs.

The ODS data are based on police employee perceptions and might be subject to certain political influences in the reporting of local problem areas to regional levels. Nonetheless, there are locations that recur over time, and that are well-known in Stockholm, and many of the locations are now also the focus of crime prevention collaboration agreements between the police and municipalities. They have also been in existence for a number of years and are hard to dispute. One might suspect that departments could report fewer ODSs over time in order to show that their work was effective, but in fact the expectation was the opposite, since there is competition for resources between local police departments in the Stockholm region. Arguing that the local area has many problem locations would form a good basis for many districts to argue that increased resources were required.

Despite only exploring the ODSs in Stockholm County, this thesis has produced insights into different types of ODS and a variety of related issues. The generalizability to other, more rural parts of Sweden, or even to urban areas characterized by city planning differences might be questioned. At the same time, many of the characteristics of the Stockholm ODSs have been found in studies from the US, Canada, and Asia. A mapping was also conducted of the ODSs in Malmö in the southern part of Sweden, and many similar patterns were found. Another study based on the ODS data in combination with another set of data focused on the same type of locations, but based on a different method, has produced similar results and similar patterns regarding the links with gun violence (Gerell et al., 2021).

In the study of ODSs (I), the data sets used to analyze crime concentrations, safety, and gun violence at ODSs, are all based on different units. The hotspot analysis of violence was based on hotspot sizes chosen to identify regional patterns and to provide a fair presentation of violent crime hotspots. The sizes of hotspots can vary greatly depending on the choice of bandwidth and cell size. The crime data used to measure how many of the total number of crimes within the region had occurred inside ODS areas were geocoded point data, which are based

on very small, specific GPS locations, compared to the size of both hot spot areas and the ODSs. In addition, the units used to analyze citizen perceptions of unsafety were municipal districts (stadsdelsområden) which are comparatively large. Nevertheless, these municipal areas were the smallest available unit that could be employed to present the data, since using smaller units would have meant that each unit contained very few citizen survey answers, which would have complicated the analysis. Areas marked as unsafe are large and relate to a community, and there may be many reasons for feeling unsafe. On the other hand, disturbances associated with the open dealing of drugs were also reported to be high in these areas. Taken together, this means that the analysis has been based on heterogenic units, which may be viewed as providing the best available data at the time the specific questions were explored.

Crime data from the police are also subject to problems that are not only associated with the reporting of crime locations discussed earlier in this thesis. Most obvious is the relationship between actual crime levels and the levels of reported crime. Since there are differences in area composition and disorganization, there might also be differences between different areas in what residents report to the police. Tolerance might be higher, for example, in areas exposed to a large amount of crime, and more serious crime is reported more often than minor offenses, the presence of police officers results in more crimes being reported, and then there are hidden crimes, with some types of offending being reported less often than others. In the search for answers relating to levels of crime concentration and the overlap between ODSs and gun crime, reported crime still constitutes the best data available. However, the recommendations section of the thesis draws attention to the use of ambulance and health care data, as well as data on calls for service, as future alternatives.

Pracademic challenges

As a final point, this section will briefly address scientific theory related to the type of in-house police research that this thesis represents. This thesis acknowledges the role of a pracademic basis for research, and gives the pracademic perspective a central role. For a pracademic who has worked as an officer within the Swedish police organization for many years, moving on to conduct research within the same police organization could lead to questions being raised about the researcher's objectivity. The subjective experiences that will inevitably be incorporated into the role of the researcher might be seen as interfering with

scientific principles, for example in relation to the choice of research questions and the hypotheses that form the basis for examining these questions. The risk of conducting biased evaluations in order to show that police interventions are effective has been highlighted by policing researchers in Sweden (Knutsson, 2015; Holgersson, 2015; Holgersson & Wieslander, 2019). The risk is, in this case, that the research might be dismissed as either being pro-police, by researching areas in which ‘good’ results for the police are expected, or being pro-research, by looking for significant research results in research areas where ‘good’ scientific results would be expected, or where the main objective is to criticize the police. Results may be interpreted on the basis of fixed ideas. Police research has both been conducted *for* the police, with the aim of contributing to improving the police, and on the basis of the involvement of external research *on* the police (Neyroud, 2016). These also represent two research directions with different aims and methods, *applied police research* and *critical research*. Critical research is based on independence from the police and has the aim of informing the governance of policing (Bradley & Nixon, 2009), while applied research involves police forces and aims to improve policy and practice. The idea of applied research being uncritical or biased is often misguided, since the core question asked by many EBP insider-researchers is ‘what works’, with the aim of identifying fields characterized by ineffective practices or policies. The starting point for this thesis was the frustration perceived in practice concerning the incessant stream of cases, and the lack of evaluation of police resource use and tactics. The subjective insider starting point of the pracademic also offers insights into the researched field, which makes the research processes shorter and reduces the number of mistakes. The motivation for conducting this thesis was based on the conviction that research is essential as a means of identifying better practice and producing more effective policing, and to evaluate the gut-feelings or policies based on experience alone. In addition, and taken together, the research presented in the studies included in the thesis has all been conducted close to the needs of practice, and has involved police officers in order to improve police practice and police research, but also in order to produce research that has practical relevance and to enable the implementation of research results in practice.

The risks of in-house research being biased or distorted must be counteracted. One way of counteracting any pre-existing perceptions is to choose high-quality research methods. The RCT was chosen in part as a result of this, in order to ensure that the evaluation would not be hampered by any preconceptions regarding police tactics at ODSs. Being part of the practice that is in focus in research

provides an insight into the relevant context and routines, shortening the research process, helping implementation, and facilitating an ability to more quickly identify areas in need of improvement. The studies are linked to real policing problems, and the results could be used by the police, municipalities, and prevention strategists, and lectures have also requested by health care departments, police departments and senior police management, as well as by prevention organizations and universities in both Sweden and abroad.

The results of the completed studies also suggest that there was no pressure from the police to produce positive results. The RCT shows no significant effect of the police tactic explored, and the ODS studies identified large numbers of ODSs across police districts, which have a severe impact on their residents, while the first mapping also showed low levels of police resources being directed at these locations. In addition, all studies have been implemented within the academic process, under the supervision of senior academics, and two of the studies have undergone the pre-publication review process and two are in the review process. Nevertheless, the choice of questions, the methods of data collection, and the analysis of results have been influenced by experience from police practice, but this is viewed as having made a positive contribution to the research.

CONCLUSION

Triple T raised to the power of T

EBP has had a major impact on the progress of policing, even though there is still much to be done. The focus on successful research and implementation in practice, and the ways in which such transition is completed, would appear to be a fruitful step forward from just ‘minding the gap’. In this next step forward in the advancement of policing, pracademic translation and an approach steered by practice and needs might offer a productive contribution to cost effective policing. In order to continue the progress of EBP, the continuous translation between practice and research needs to be strengthened. This thesis has highlighted the useful role that pracademics, affiliated to universities, can play in this process. They do not represent the sole solution to improving the translation of research for practitioners. However, the already existing pracademic resource at many police forces with a long reach could be well placed at the center of an organization in order to conduct high-quality research that is relevant to practice, creating organizational learning, adjusting expectations regarding the pace of the research process, making sense and use of data, aligning research collaborations, and improving measures. The addition of *translation* to the Triple T principle would be best viewed as permeating the entire thesis, and thus the Triple T has been raised to the power of T(translation), since this has partly formed the ODS-focused studies (I, II and III) and constituted the basis for the meta-study (IV).

In order to find solutions to the problems associated with ODSs and gun violence, which have a major effect on residents, the locations of interest require tailored interventions based on research evidence and evaluated methods. A large number of question marks remain regarding how to respond to the negative developments in neighborhoods and drug markets in Sweden. Making use of pracademics in the

process of a Triple T based EBP practice will produce the conditions needed for translating between police practice, policy, and research, and will lead to the improvements to policing that are needed in Sweden and elsewhere in order to combat the effects of drug markets.

POPULÄRVETENSKAPLIG SAMMANFATTNING

Inom polisforskningen refereras det ofta till ett glapp mellan polisens praktik och forskningen. Glappet förklaras bland annat med forskningens avsaknad av relevans för praktiken och polisorganisationens skepsis till forskning. Polisforskningen har blomstrat längsmed att "evidence based policing" (EBP)-rörelsen vuxit sig starkare och etablerat sig inom polisverksamhet runt om i världen. EBP syftar till att effektivisera polisen genom att väva samman praktik och forskning. Individer med både praktisk och akademisk kunskap sk "prakademiker" lyfts fram inom EBP, som möjliggörare i överbryggandet mellan praktiken och forskningen. Dessa prakademiker anses kunna översätta mellan de två världarna och därmed underlätta den implementering som krävs för att forskningen ska bli en del av polisverksamheten.

Med hjälp av principer från EBP, och med ett särskilt fokus på att översätta mellan polisiär praktik, policy och forskning, syftar denna avhandling till att med ett plats-baserat fokus utforska platser med öppet bruk och försäljning av narkotika, sk "Öppna drogscener" (ÖDS). Vid sidan om detta syfte eftersträvar avhandlingen också att utveckla EBP i Sverige. Utifrån tre grundläggande kriminologiska teorier; desorganisationsteorin, rutinaktivitetsteorin samt situationella aktivitetsteorin appliceras strukturella, individuella och situationella perspektiv på ÖDS. Med en prakademisk utgångspunkt är tillvägagångssättet att analysera och se samband utifrån ett geografiskt, kriminologiskt perspektiv med fokus på små s.k. microplatser och samtidigt lyfta fram översättandet mellan praktik, strategi och forskning.

Den första empiriska studien kartlägger ÖDS i Polisregion Stockholm, dess områden, effekter och mönster. Den visar att det finns ett 50-tal ÖDS med

brottskoncentration, skjutvapenvåld och med otrygghet som följd. De allra flesta ÖDS ligger i anslutning till kommunikationsnätet, främst vid tunnelbane- och pendeltågsstationer, är väletablerade, har funnits länge och medför allvarliga konsekvenser för samhället. Tre olika typer av ÖDS kunde kategoriseras, två typer lokaliserade till bostadsområden, varav en i utsatta områden och en tredje typ i kommersiella centrum med en hög grad av anonymitet, som t.ex. ”Plattan”, vid Sergels torg. Kategoriseringen ger en grund för att kunna skräddarsy framtida insatser baserat på områdets egenskaper, stabilitet, nivåer av våld och gängaktivitet.

Den andra empiriska studien undersöker kopplingen mellan det grövsta av problemen på dessa platser nämligen skjutvapenvåldet och dess koppling till ÖDS. Mikroplatser förknippade med ÖDS och skjutvapenvåld visade sig kännetecknas av tuffa sociala förhållanden och höga nivåer av brottslighet. Skjutvapenvåldet är starkt kopplat till ÖDS, speciellt där kriminella nätverk ligger i konflikt med varandra. De förhållanden som visade sig vara värre i dessa områden jämfört med andra platser användes i denna studie i skapandet av ett index med målet att förutspå var skjutningar kommer äga rum i framtiden. Resultatet visar att i kombination kan de platser som är ÖDS och de platser som har störst sociodemografisk utsatthet och höga brottsnivåer tillsammans väl förutspå var skjutningar kommer ske.

Den tredje studien utvärderar motiverande samtal med misstänkta för narkotikabrott vilket är en av polisens arbetsmetoder på ÖDS. I ett randomiserat experiment skapades två grupper där en av grupperna fick motiverande samtal och den andra utgjorde en kontrollgrupp. Grupperna jämfördes sedan i återfall i narkotikabrott. Grundantagandet var att om motiverande samtal ger positiv effekt på missbrukare så att de söker och får vård, och om vården fungerar väl så borde de inte återfalla i narkotikabrott. Dock visade experimentet att nästan lika många av de som fick motiverande samtal återföll i narkotikabrott som de som inte fick. Resultatet ger vägvisning till hur man bör styra polisens arbetsmetoder på ÖDS och också vilka effekter man kan förvänta sig. Det är inte självklart att man ska slopa dessa samtal men förväntningarna på vad de ska åstadkomma kanske ska förändras.

Den sista studien i avhandlingen är en meta-studie i det avseende att den ”studerar en studie”, nämligen studie III, för att hitta ledtrådar till hur ”prakademiker” påverkar implementeringen av experiment. Studien baseras också på enkätsvar från de poliser som medverkat i experimentet och belyser hur de uppfattar att

experimentera i sitt dagliga arbete. Enkätsvaren visar att polisernas förtroende för experimentet var kopplat till att det i rollen som projektansvarig dels fanns polisiär kunskap om narkotikabekämpning, dels relevant vetenskapligt baserad kunskap. Studien fann även att frustration hos polisanställda var en möjlig dörröppnare för forskning och visade på framgångsfaktorer kopplade till en ”prakademisk” forskningsansats.

I den här avhandlingen har både kunskap om öppna drogsccener och de konsekvenser de medför lyfts fram. Utifrån kriminologiska teorier framhålls i denna avhandling vidare, våldsam subkultur som en faktor som bidragit till negativ utveckling i utsatta områden med skjutningar, öppen droghandel och gäng. Distans till vedertagna samhällsvärderingar och brist på informell social kontroll kan teoretiskt förklara en stor del av den utveckling som sker. Polisen kommer att behöva fylla mycket av den kontrollbrist som finns i regionens problemfyllda områden och då behöver innehållet vara välanpassat, uppdaterat, inkluderande och bygga på allmänt vedertagna värderingar. Fortsatta djupgående analyser av ÖDS, skjutningar och områdesförhållanden behövs för att kunna skapa evidensbaserade metoder som möter problemen. Hot spots patrullering (dvs riktad patrullering mot särskilt brottsdrabbade platser) utifrån aktuell forskning och efterföljande utvärdering föreslås tillsammans med kameraövervakning vara lovande arbetsmetoder. Polisorganisationen rekommenderas hitta motivation bland medarbetarna att använda forskning, från högt uppsatta chefer till ingripande poliser och all verksamhet däremellan. Polismyndigheten i Sverige bör även ta tillvara de ”prakademiker” som finns i organisationen för att överbrygga glappet mellan forskning och praktik i skapandet av evidensbaserad narkotikabekämpning men även polisverksamhet i stort.

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REFERENCES

- Alatalo, J. M., & Ostapenko, O. V. (2014). The Swedish system: The image cracking when taking a closer look. *Geoforum*, 53, 82-83.
- Andersson, R. (1998) Socio-spatial dynamics: Ethnic divisions of mobility and housing in post-Palme Sweden. *Urban Studies*, 35(3): 397-428.
- Anderson, Elijah (1999). *Code of the Street: Decency, Violence, and the Moral Life of the Inner City*. New York: W. W. Norton.
- Anderson, E. (2020). The Code of the Streets: How the inner-city environment fosters a need for respect and a self-image based on violence. In Vogel, M. (Ed.), *Crime, Inequality and the State* (pp. 393-402). Routledge.
- Andreas, P., & Wallman, J. (2009). Illicit markets and violence: what is the relationship?. *Crime, Law and Social Change*, 52(3), 225-229.
- Aneshensel, C. S., & Sucoff, C. A. (1996). The Neighborhood Context of Adolescent Mental Health. *Journal of health and social behavior*, 37(4), 293-310.
- Ariel, B. (2018). Not all evidence is created equal”: On the importance of matching research questions with research methods in evidence based policing. In Mitchell, R. & Huey, L. (Eds.), *Evidence Based Policing: An Introduction to Key Ideas*, pp, 63-86. Bristol: Policy Press.
- Axnäs, N. (forthcoming). *Polisens förutsättningar och förmåga att utreda och klara upp mängdbrottsmisshandel*. (Translates to: The prerequisites and ability of the police to investigate and solve volume crimes; minor assaults). Dissertation Malmö University.
- Bacon, M. (2013). The Informal Regulation of an Illegal Trade: The Hidden Politics of Drugs Detective Work. *Etnografia e Ricerca Qualitativa*, 1: 61-80.
- Bayley, D. H. (1998). *Policing in America: Assessment and Prospects*. Washington, DC: Police Foundation.
- Berg, M. T., & Rengifo, A. F. (2009). Rethinking community organization and robbery: Considering illicit market dynamics. *Justice Quarterly*, 26(2), 211-237.

- Bjurmark, L., & Dejemyr, K. (2021). *Gärningsmannen är polis*. Bazar förlag: Stockholm.
- Bland, M., Leggetter, M., Cestaro, D., & Sebire, J. (2021). Fifteen minutes per day keeps the violence away: a crossover randomised controlled trial on the impact of foot patrols on serious violence in large hot spot areas. *Cambridge Journal of Evidence-Based Policing*, 5(3), 93-118.
- Bless, R., Korf, D. J., & Freeman, M. (1995). Open drug scenes: A cross-national comparison of concepts and urban strategies. *European Addiction Research*, 1(3), 128-138.
- Block, C. R., & Block, R. (1993). *Street gang crime in Chicago*. Washington, DC: National Institute of Justice.
- Blumstein, A. (1995a). Violence by young people: Why the deadly nexus. *National Institute of Justice Journal*, 229(August), 2-9.
- Blumstein, A. (1995b). Youth violence, guns, and the illicit-drug industry. *Journal of Criminal Law and Criminology*, 86(1), 10-36.
- Boessen, A., & Hipp, J. R. (2015). Close-Ups and the Scale of Ecology: Land Uses and the Geography of Social Context and Crime. *Criminology*, 53 (3): 399–426.
- Bowers, K. J., Johnson, S. D., Guerette, R. T., Summers, L., & Poynton, S. (2011). Spatial displacement and diffusion of benefits among geographically focused policing initiatives: A meta-analytical review. *Journal of Experimental Criminology*, 7(4), 347–374. doi:10.1007/s11292-011-9134-8.
- Bradley, D., & Nixon, C. (2009). Ending the ‘dialogue of the deaf’: Evidence and policing policies and practices. An Australian case study. *Police Practice and Research: An International Journal*, 10(5-6), 423-435.
- Braga, A., & Weisburd, D. (2010). *Policing problem places: Crime hot spots and effective prevention*. New York, NY: Oxford University Press.
- Braga, A. A., & Clarke, R. V. (2014). Explaining High-Risk Concentrations of Crime in the City: Social Disorganization, Crime Opportunities, and Important Next Steps. *Journal of Research in Crime and Delinquency*, 51(4), 480–498. <https://doi.org/10.1177/0022427814521217>
- Braga, A. A. (2016). The value of ‘pracademics’ in enhancing crime analysis in police departments. *Policing: A Journal of Policy and Practice*, 10(3), 308–314.
- Braga, A. A., & Schnell, C. (2018). Beyond putting ‘cops on dots’: Applying theory to advance police responses to crime places. In J. E. Eck, & D. Weisburd (Eds.), *Connecting crime to place: New Directions in Theory and Policy. Advances in Criminological Theory* (22, pp. 261–288). New Brunswick, NJ: Transaction Press
- Braga, A. A., Turchan, B. S., Papachristos, A. V., & Hureau, D. M. (2019). Hot spots policing and crime reduction: An update of an ongoing systematic review and meta-analysis. *Journal of Experimental Criminology*, 15(3), 289–311.

- Brante, T., Johnsson, E., Olofsson, G., & Svensson, L. (2015). *Professionerna i kunskapssamhället: en jämförande studie av svenska professioner*. Liber: Stockholm
- Brantingham, P. L., & Brantingham P. J. (1993). Nodes, Paths and Edges: Considerations on the Complexity of Crime and the Physical Environment. *Journal of Environmental Psychology*, 13(1), 3–28.
- Brantingham, P. L., & Brantingham P. J. (1995). Criminality of Place: Crime Generators and Crime Attractors. *European Journal on Criminal Policy and Research*, 3(3), 5–26.
- Brantingham, P. L., & Brantingham, P. J. (1999). A theoretical model of crime hot spot generation. *Studies on Crime & Crime Prevention*, 8(1), 7–26.
- Brantingham, P. L., Brantingham, P. J., Vajihollahi, M., Wuschke, K. (2009). Crime Analysis at multiple scale of aggregation: A topological approach. In Weisburd, D., Bernasco, W., Bruinsma, G. J. N. (Eds.), *In putting crime in its place: Units of analysis in geographic criminology* (pp. 87-107). New York, NY: Springer.
- Brantingham, P. J., Yuan, B., & Herz, D. (2021). Is gang violent crime more contagious than non-gang violent crime? *Journal of Quantitative Criminology*, 37(4), 953-977.
- Bretherton, I. (1992). The Origins of Attachment Theory: John Bowlby and Mary Ainsworth. *Developmental Psychology*, 28 (5): 759–775. doi:10.1037/0012-1649.28.5.759.
- Browning, C. R., Byron, R. A., Calder, C. A., Krivo, L. J., Kwan, M., Lee, J., & Peterson, R. D. (2010). Commercial Density, Residential Concentration, and Crime: Land Use Patterns and Violence in Neighborhood Context. *Journal of Research in Crime and Delinquency*, 47 (3):329–57.
- Bruinsma, GJN., Weisburd, D. (2014) History of geographic criminology I: The 19th century. In: Bruinsma, GJN, Weisburd, D (Eds.) *The Encyclopedia of Criminology and Criminal Justice*. New York: Springer, 2159–2163.
- Brunner, A., Rostami, A., Gerell, M., Sturup, J., Khoshnood, A. (forthcoming). Implication of the New Swedish Weapon Law on detained individuals and Shootings.
- BRÅ (2000). *Kriminaliseringen av narkotikabruk. En utvärdering av rättsväsendets insatser*. (Criminalization of drug use. An evaluation of Criminal Justice efforts). BRÅ-rapport 2000:21. Stockholm: Swedish National Council for Crime Prevention. https://bra.se/download/18.cba82f7130f475a2f1800019696/1371914731964/2000_21_kriminalisering_av_narkotikabruk.pdf
- BRÅ (2014). *Police crime prevention in hot spots. The results and experiences from two projects targeting muggings and assault*. Brå rapport (2014:15). Stockholm: Swedish National Council for Crime Prevention. https://bra.se/download/18.12caa4f91440b31239f321b/1399560117212/2014_Crime%20prevention%20in%20hot%20spots.pdf

- BRÅ (2021a). *Dödligt skjutvapenvåld i Sverige och andra europeiska länder En jämförande studie av nivåer, trender och våldsmetoder*. (Gun homicide in Sweden and other European countries. A comparative study of levels, trends and homicide by other means). Brå rapport 2021:8. Stockholm: Swedish National Council for Crime Prevention. https://bra.se/download/18.1f8c9903175f8b2aa70c9a1/1629181100220/2021_8_Dodligt_skjutvapenvald_i_Sverige_och_andra_europeiska_lander.pdf
- BRÅ (2021b). *Narkotikamarknader: En studie av smuggling, gatuförsäljning, internethandel och köpare*. (Drug markets: A study of smuggling, street sales, internet trade and buyers). Rapport 2021:10. Stockholm: Swedish National Council for Crime Prevention. https://bra.se/download/18.1f8c9903175f8b2aa70f67b/1631001260503/2021_10_Narkotikamarknader.pdf
- BRÅ (2021c). Nationella trygghetsundersökningen 2021 [Swedish Crime Survey 2021]. Technical report. Report 2021:11. Stockholm: Swedish National Council for Crime Prevention. <https://bra.se/bra-in-english/home/publications/archive/publications/2021-10-12-swedish-crime-survey-2021.html>
- Bursik, R. J., & Grasmick, H. G. (1993). Economic Deprivation and Neighborhood Crime Rates, 1960-1980. *Law and Society Review*, 27(2), 263.
- Ceccato, V., Ioannidis, I., Galanti, M. R., Magnusson, C., Magnusson, M-M. (Submitted). The situational conditions of cannabis: A Scandinavian study case. *International Journal of Drug Policy*.
- Chainey, S., & Ratcliffe, J. (2005). *GIS and Crime Mapping*. London: Wiley.
- Chainey, S., & Ratcliffe, J. (2013). *GIS and crime mapping*. London: John Wiley & Sons.
- Clarke, R. V. (1995). Situational crime prevention. *Crime and justice*, 19, 91-150.
- Cloward, R. A., & Ohlin, L. E. (1960): *Delinquency and Opportunity: A theory of Delinquent Gangs*. New York: Free Press.
- Cohen, L. E., & Felson, M. (1979): Social Change and Crime Rate Trends: A Routine Activities Approach. *American Sociological Review*, 44:588-608.
- Cohen, J., Gorr, W., & Singh, P. (2003). Estimating intervention effects in varying risk settings: Do police raids reduce illegal drug dealing at nuisance bars? *Criminology*, 41(2), 257-292.
- Cook, P. J. (2020). Thinking about gun violence. *Criminology & Public Policy*, 19(4), 1371-1393.
- Crawford, A., (2017). Research co-production and knowledge mobilisation in policing: some insights from innovations in police-university collaboration. In: J. Knutsson and L. Tompson, (Eds.), *Advances in evidence-based policing*. London: Taylor & Francis, 195–213.
- DEA Publications (1996). *Methamphetamine Situation in the United States*. Springfield, Virginia: US Drug Enforcement Administration. DEA

- Dewitt, B., Persson, J., Wahlberg, L., & Wallin, A. (2021). The epistemic roles of clinical expertise: An empirical study of how Swedish healthcare professionals understand proven experience. *Plos one*, 16(6), e0252160.
- Docherty, M., Mulvey, E., Beardslee, J., Sweeten, G., & Pardini, D. (2020). Drug dealing and gun carrying go hand in hand: Examining how juvenile offenders' gun carrying changes before and after drug dealing spells across 84 months. *Journal of Quantitative Criminology*, 36(4), 993-1015.
- Dolmén, L. (2002). *Brottslighetens geografi: En analys av brottsligheten i Stockholms län*. (Doctoral dissertation). Stockholm: Kriminologiska institutionen, Stockholms universitet.
- Eck, J. E. (1995). A general model of the geography of illicit retail marketplaces. *Crime and place*, 4, 67-93.
- Eck, J. E. (2019). Place managers and crime places. In Oxford Research Encyclopedia of Criminology and Criminal Justice.
- Eck, J. E., & Spelman, W. (1987). *Problem-solving: Problem-oriented policing in Newport News*. Washington, DC: National Institute of Justice.
- Eck, J. E., Clarke, R. V., & Guerette, R. T. (2007). Risky facilities: Crime concentration in homogeneous sets of establishments and facilities. *Crime prevention studies*, 21, 225.
- EMCDDA, European Monitoring Centre for Drugs and Drug Addiction (2015). *Euro-pean Drug Report 2015: Trends and Developments*. Luxembourg: Publications Office of the European Union.
- EMCDDA, European Monitoring Centre for Drugs and Drug Addiction (2020). *European Drug Report 2020: Trends and Developments*. Luxembourg: Publications Office of the European Union.
- EMCDDA, European Monitoring Centre for Drugs and Drug Addiction (2021). *European Drug Report 2021: Trends and Developments*. Luxembourg: Publications Office of the European Union.
- Engel, R. S., & Whalen, J. L. (2010). Police-academic partnerships: Ending the dialogue of the deaf, the Cincinnati experience. *Police practice and research: an international journal*, 11(2), 105-116.
- Expressen.se 2017, Polisanställda vittnar om sextrakasserier. 17/12 2017. Retrieved from [expressen.se](https://www.expressen.se)
- Falk, P. (1981). Auflösung einer offenen Drogenszene. *Kriminalistik*, 5, 256-259.
- Felson, M., & Boba, R. (2010). *Crime and Everyday Life*. 4th ed. Thousand Oaks, CA: Sage Publications, Inc.

- Feltmann, K., Gripenberg, J., Strandberg, A. K., Elgán, T. H., & Kvillemo, P. (2021). Drug dealing and drug use prevention—a qualitative interview study of authorities’ perspectives on two open drug scenes in Stockholm. *Substance Abuse Treatment, Prevention, and Policy*, 16(1), 1-14.
- Fisher, B. (1991). A neighborhood business area is hurting: Crime, fear of crime, and disorders take their toll. *Crime & Delinquency*, 37(3), 363-373.
- Forbes 2021. 22 October 2021. Sweden’s Brutal Gang Problem: Here’s What Officials Blame It On. Retrieved from: <https://www.forbes.com/sites/lisakim/2021/10/22/swedens-brutal-gang-problem-heres-what-officials-blame-it-on/?sh=4fb51765a281>
- Friman, H. R. (2009). Drug markets and the selective use of violence. *Crime, law and social change*, 52(3), 285-295.
- Gerell, M. (2017). *Neighborhoods without community: Collective efficacy and crime in Malmö, Sweden*. (Doctoral dissertation). Malmö: Malmö University, Faculty of Health and Society.
- Gerell, M. (2018). Quantifying the geographical (un) reliability of police data. *Nordisk politiforskning*, 5(02), 157-171.
- Gerell, M. (2021a). Does the Association Between Flows of People and Crime Differ Across Crime Types in Sweden? *European Journal on Criminal Policy and Research*, 27, 433–449.
- Gerell, M. (2021b). The benefits and challenges of embedding criminologists in crime analysis units, An example from Sweden. In Piza, E. L., & Welsh, B. C. (Eds.). *The Globalization of Evidence-Based Policing: Innovations in Bridging the Research–Practice Divide* (pp.166-177). Routledge. <https://doi.org/10.4324/9781003027508>
- Gerell, M., & Kronkvist, K. (2017). Violent crime, collective efficacy and city-centre effects in Malmö. *British Journal of Criminology*, 57(5), 1185-1207.
- Gerell, M., Sturup, J., Magnusson, M. M., Nilvall, K., Khoshnood, A., & Rostami, A. (2021). Open drug markets, vulnerable neighborhoods and gun violence in two Swedish cities. *Journal of Policing, Intelligence and Counter Terrorism*, 16 (3), 223-244.
- Gerell, M., Puur, M., & Guldåker, N. (2021). Swedish conditions? Characteristics of locations the Swedish police label as vulnerable. *OSF Preprints*. <https://doi.org/10.31219/osf.io/3ndsw>
- GfK Verein (2018). *Trust in professions 2018 – A GfK Verein Study*. Retrieved from: https://www.nim.org/sites/default/files/medien/135/dokumente/2018_-_trust_in_professions_-_englisch.pdf
- Goldstein, H. (1979). Improving policing: A problem-oriented approach. *Crime & delinquency*, 25(2), 236-258.
- Goldstein. H. (1990). *Problem-Oriented Policing*. New York: McGraw-Hill
- Gould, R. V. (2003). *Collision of wills: How ambiguity about social rank breeds conflict*. Chicago: University of Chicago Press.

- Granath, S., & Sturup, J. (2018). Homicide clearance in Sweden 1990–2013 with special reference to firearm-perpetrated homicides. *Journal of Scandinavian Studies in Criminology and Crime Prevention*, 19(1), 98–112.
- Granér, R. (2016). Kontroll av och i polisorganisationen. (Control by and within the police organization). In Larsson, P., Granér, R. & Gundhus, H. O. I. (Eds.). *Polisvetenskap. En introduktion*, (Police science, an introduction) pp. 53–79. Lund: Studentlitteratur.
- Gravelle, J., & Rogers, C. (Eds.). (2014). *Researching the Police in the 21st Century: International Lessons from the Field*. Basingstoke. Palgrave Macmillan.
- Green, B., Horel, T., Papachristos, A. V. (2017). Modeling contagion through social networks to explain and predict gunshot violence in Chicago, 2006 to 2014. *JAMA Intern Med*, 177(3):326–333.
- Hirschi, T. (1969): *The Causes of Delinquency*. Berkeley, CA: University of California Press
- Holgersson, S. (2005). *Yrke: Polis: Yrkeskunskap, motivation, IT-system och andra förutsättningar för polisarbete*. (Doctoral dissertation). Linköping: Linköpings Universitet, Institutionen för datavetenskap.
- Holgersson, S. (2015). An inside job: Managing mismatched expectations and unwanted findings when conducting police research as a police officer. In E. Cockbain & J. Knutsson (Eds.), *Applied police research: Changes and opportunities* (pp. 106–116). New York, NY: Routledge.
- Holgersson, S., & Wieslander, M. (2019). Conducting Critical Research on Powerful Organisations: Challenges for Research Independence. *Nordisk politiforskning*, 6(2), 136–155.
- Holgersson, S., & Knutsson, J. (2011). *Polisens arbete mot narkotika*. Stockholm: Rikspolisstyrelsen.
- Huey, L., & Mitchell, R. J. (2016). Unearthing hidden keys: Why academics are an invaluable (if underutilized) resource in policing research. *Policing: A Journal of Policy and Practice*, 10(3), 300–307.
- Hunter, G., May, T., & Hough, M. (2019). Are the police embracing evidence-informed practice? A view from England and Wales. *Policing and society*, 29(3), 251–265.
- Ivert, A. K., Levander, M. T., & Mellgren, C. (2015). Den ojämlika otryggheten–stabilitet och förändring i bostadsområden över tid. *Socialvetenskaplig tidskrift*, 22(3–4).
- Ivert, A. K., & Magnusson, M.M. (submitted). Mental health problems among unaccompanied refugee minors treated for substance abuse. *Migration and Health*.
- Johnson, L. T. (2016). Drug markets, travel distance, and violence: Testing a typology. *Crime & Delinquency*, 62(11), 1465–1487.
- Ju (2012:16). Polismyndighetens styrmodell. Rapport. (Governmental inquiry. Report on the Police Authority's steering model): Ju2012:16/2014. Genomförandekommittén för nya Polismyndigheten (Committee of execution of the new police authority).

- Kelling, G. L. (2008). *Organizational Stressors and Police Performance*. (Doctoral dissertation). Rutgers, State University of New Jersey.
- King, W. R. (2005). Toward a better understanding of the hierarchical nature of police organizations: Conception and measurement. *Journal of criminal justice*, 33(1), 97-109.
- Knutsson, J. (2015). Politics, promises and problems: The rise and fall of the Swedish police evaluation unit. In E. Cockbain & J. Knutsson (Eds.), *Applied police research: Changes and opportunities* (pps. 111-121) New York, NY: Routledge. .
- Koper, C. S. (1995). Just enough police presence: Reducing crime and disorderly behavior by optimizing patrol time in crime hot spots. *Justice Quarterly*, 12, 649-672.
- Koper, C. S., Egge, S. J., & Lum, C. (2015). Institutionalizing place-based approaches: Opening 'cases' on gun crime hot spots. *Policing: A Journal of Policy and Practice*, 9(3), 242-254.
- Kornhauser, R. R., (1978) *Social Sources of Delinquency: An Appraisal of Analytic Models*. Chicago: University of Chicago Press.
- Kronkvist, K., Nordqvist, S., & Ivert, A. K. (2019). *Kamerabevakning i ett särskilt utsatt bostadsområde: Uppfattningar, erfarenheter och effekter av polisiär kamerabevakning med syfte att minska brottsligheten och öka tryggheten*. Malmö Universitet, Institutionen för Kriminologi.
- Kääriäinen, J. T. (2007). Trust in the Police in 16 European Countries: A Multilevel Analysis. *European Journal of Criminology*, 4(4), 409-435. <https://doi.org/10.1177/1477370807080720>
- Lager, A., Berlin, M., Heimerson, I., & Danielsson, M. (2012). Young people's health. Health in Sweden: The national public health report 2012. Chapter 3. *Scandinavian Journal of Public Health*, 40(9_suppl), 42-71.
- Laub, J. R., & Frisch, N. E. (2016). Translational criminology: A new path forward (pp. 52-62). In T. G. Blomberg, J. M. Brancale, K. M. Beaver, and W. D. Bales (Eds.), *Advancing criminology and criminal justice policy*. New York: Routledge.
- La Vigne, N. G., Lowry, S. S., Markman, J. A., & Dwyer, A. M. (2011). *Evaluating the use of public surveillance cameras for crime control and prevention*. Washington, DC: Urban Institute Justice Police Center
- Levander, S. (forthcoming). Police Pracademics – the merge of tacit and scientific knowledge in an old profession/young science.
- Levine, N. (2006). Crime mapping and the Crimestat program. *Geographical Analysis*, 38, 41-56.
- Lipsky, M. (2010) *Street-Level Bureaucracy: Dilemmas of the Individual in Public Service*, 30th Anniversary Expanded Edition. New York: Russell Sage Foundation.
- Loftus, B. (2008) Dominant culture interrupted: recognition, resentment and the politics of change in an English police force. *British Journal of Criminology*, 48 (6): 778-797.

- Lum, C. (2008). The geography of drug activity and violence: Analyzing spatial relationships of non-homogenous crime event types. *Substance Use & Misuse*, 43(2), 179-201.
- Lum, C. (2009) *Translating police research into practice*. Washington, DC: Police Foundation (Ideas in American Policing Series, No. 11). https://www.policefoundation.org/wp-content/uploads/2015/06/Ideas_Lum_0.pdf
- Lum, C. (2011). Violence, drug markets and racial composition: challenging stereotypes through spatial analysis. *Urban studies*, 48(13), 2715-2732.
- Lum, C., Koper, C. S., & Telep, C. W. (2011). The evidence-based policing matrix. *Journal of Experimental Criminology*, 7(1), 3-26.
- Lum, C., & Koper, C. (2012). Incorporating research into daily police practice: The Matrix Demonstration Project. *Translational Criminology*, Fall, 16-17.
- Lum, C., Telep, C. W., Koper, C. S., & Grieco, J. (2012). Receptivity to research in policing. *Justice Research and Policy*, 14(1), 61-95.
- Lum, C. M., & Koper, C. S. (2017). *Evidence-based policing: Translating research into practice*. Oxford: Oxford University Press.
- Lundahl, B., & Burke, B. L. (2009). The effectiveness and applicability of motivational interviewing: A practice-friendly review of four meta-analyses. *Journal of clinical psychology*, 65(11), 1232-1245.
- Lösel, F., & Farrington, D. P. (2012). Direct protective and buffering protective factors in the development of youth violence. *American Journal of Preventive Medicine*, 43, S8-S23.
- Magnusson, M. M. (2020). Mapping open drug scenes (ODS). In Ceccato, V., & Nalla, M. K. (Eds.), *Crime and fear in public places: Towards safe, inclusive and sustainable cities* (pp. 305-325). London & New York: Routledge
- Markovic, J. (2007). Book Review: Chainey, S., & Ratcliffe, J. (2005). *GIS and Crime Mapping*. London: Wiley. (422 pp., \$60.00 paperback). *Social Science Computer Review*, 25, 279-282.
- Martin, P., & Mazerolle, L. (2016). Police leadership in fostering evidence-based agency reform. *Policing: a journal of policy and practice*, 10(1), 34-43.
- Mazerolle, L., Soole, D. W., & Rombouts, S. (2006). Street-level drug law enforcement: A meta-analytical review. *Journal of Experimental Criminology*, 2(4), 409-435.
- Mazerolle, L., Eggins, E., & Higginson, A. (2020). Street-level drug law enforcement: An updated systematic review. *Trends and Issues in Crime and Criminal Justice*, (599), 1-20.
- McNeil, R., Shannon, K., Shaver, L., Kerr, T., & Small, W. (2014). Negotiating place and gendered violence in Canada's largest open drug scene. *International Journal of Drug Policy*, 25(3), 608-615.
- Miller, W. R., & Rollnick, S. (2012). *Motivational Interviewing: Helping People Change*. New York: Guilford Press

- Mitchell, R.J. (2019), "A light introduction to evidence based policing", in Mitchell, R.J. and Huey, L. (Eds.), *Evidence Based Policing: An Introduction*, Policy Press, Bristol, pp. 3-14.
- Mobiliserings mot narkotika (2004). Organiserad kriminalitet, grov narkotikabrottslighet, Rapport. Stockholm, June 2004. (<http://www.mobilisera.nu/upload/4988/OKGNB.pdf>)
- Moore, M. H. (2006). Improving Police through Expertise, Experience and Experiments. In Weisburd D. & Braga, and A. A. (Eds.), *Police Innovation: Contrasting Perspectives*. Cambridge: Cambridge University Press.
- Nagin, D. S., & Telep, C. W. (2020). Procedural justice and legal compliance: A revisionist perspective. *Criminology & Public Policy*, 19(3), 761-786.
- Neyroud, P. (2016). The ethics of learning by testing: The police, professionalism and researching the police. In Cowburn, M., Gelsthorpe, L., & Wahidin, A. (Eds.). *Research Ethics in Criminology: Dilemmas, Issues and Solutions* (1st ed.) (pp. 89-106). New York: Routledge.
- Neyroud, P. W. (2017). *Learning to Field Test in Policing: Using an analysis of completed randomised controlled trials involving the police to develop a grounded theory on the factors contributing to high levels of treatment integrity in Police Field Experiments*. (Doctoral dissertation). Cambridge: University of Cambridge.
- Neyroud, P. (2019). Ethical Leadership in Policing: Towards a New Evidence-Based, Ethical Professionalism? In *Police Leadership* (pp. 3-22). Palgrave Macmillan, Cham.
- Neyroud, P. W. (2020). Draft Paper for the Hebrew University Jerusalem 2019 Conference on Evidence-Based Policing.
- Neyroud, P.W. & Weisburd, D. (2014). Transforming the Police Through Science: The Challenge of Ownership. *Policing: A Journal of Policy and Practice*, 8(4), 287-293, <https://doi.org/10.1093/policing/pau048>.
- Nilsson, I., & Wadeskog, A. (2008). Varje drogfri dag en framgång. Tillgänglig på <http://www.secab.se/Metadon/Metadon2008.pdf>.
- OECD (2011). *Divided We Stand: Why Inequality Keeps Rising*. OECD Publishing, Paris.
- Olaghere, A., & Lum, C. (2018). Classifying "micro" routine activities of street-level drug transactions. *Journal of Research in Crime and Delinquency*, 55(4), 466-492.
- O'Neill, M., & McCarthy, D. (2014). (Re) Negotiating Police Culture through Partnership Working: Trust, Compromise and the 'New' Pragmatism'. *Criminology and Criminal Justice*, Vol 14 (2): 143-159
- Patchin, J. W., Huebner, B. M., McCluskey, J. D., Varano, S. P., & Bynum, T. S. (2006). Exposure to community violence and childhood delinquency. *Crime & Delinquency*, 52(2), 307-332.
- Perez, D. W., & Shtull, P. R. (2002) Police Research and Practice: An American Perspective. *Police Practice and Research*, 3:3, 169-187, DOI:10.1080/15614260220150573

- Persson, J. (2019). Will science and proven experience converge or diverge?: The ontological considerations. In *Maurinian Truths: Essays in honor of Anna-Sofia Maurin on her 50th birthday* (pp. 97-106). Department of Philosophy, Lund University.
- Regional Police Stockholm (2018). Bratthall, O. (Ed.) *Öppna drogscener: metoder för lokal samverkan kring arbetet med öppna drogscener* (Dnr: A102.918/2017) [brochure]. Stockholm: Länssamarbetet för ANDT-frågor i Stockholms län. Retrieved 2021-12-15 från, https://www.lansstyrelsen.se/download/18.26f506e0167c605d5693cf5e/1551096020979/metoder_kring_arbetet_med_oppna_drogscener_stockholm.pdf
- Papachristos, A. V. (2009). Murder by structure: Dominance relations and the social structure of gang homicide. *American Journal of Sociology*, 115(1):74–128
- Papachristos, A. V., Wildeman, C., & Roberto, E. (2015). Tragic, but not random: The social contagion of nonfatal gunshot injuries. *Soc Sci Med*, 125:139–150.
- Patients Act 2014/821. *Patientlag* (2014:821).
- Piza, E. L., Caplan, J. M., Kennedy, L. W., & Gilchrist, A. M. (2015). The effects of merging proactive CCTV monitoring with directed police patrol: A randomized controlled trial. *Journal of Experimental Criminology*, 11(1), 43-69.
- Piza, E. L., Szkola, J., & Blount-Hill, K. L. (2021). How can embedded criminologists, police academics, and crime analysts help increase police-led program evaluations? A survey of authors cited in the evidence-based policing matrix. *Policing: A Journal of Policy and Practice*, 15(2), 1217-1231.
- Piza, E., & Welsh, B. (2021). Evidence-based policing: Research, practice, and bridging the great divide. In Piza, E. and Welsh, B. (Eds.), *The Globalization of Evidence-Based Policing: Innovations in Bridging the Research-Practice Divide* (pp.3-20). London, UK: Routledge Press.
- Posner, P. L. (2009). The pracademic: An agenda for re-engaging practitioners and academics. *Public Budgeting & Finance*, 29(1), 12-26.
- Prop. 2020/21:60. *Forskning, frihet, framtid – kunskap och innovation för Sverige*. <https://regeringen.se/4af915/contentassets/da8732af87a14b689658dadcfb2d3777/forskning-frihet-framtid-kunskap-och-innovation-for-sverige.pdf>
- Pyrooz, D. C., Turanovic, J. J., Decker, S. H., & Jun, W. (2016). Taking stock of the relationship between gang membership and offending: A meta-analysis. *Crim Justice Behav*, 43(3):365–397
- Ratcliffe, J. H. (2006). A temporal constraint theory to explain opportunity-based spatial offending patterns. *Journal of Research in Crime and Delinquency*, 43(3), 261-291.
- Ratcliffe, J. (2021). Developing evidence-based crime reduction skills in mid-level command staff. In Piza, E. and Welsh, B. (Eds.), *The Globalization of Evidence-Based Policing: Innovations in Bridging the Research-Practice Divide* (pp.39-52). London, UK: Routledge Press.

- Ratcliffe, J. H., & Rengert, G. F. (2008). Near-repeat patterns in Philadelphia shootings. *Security Journal*, 21(1), 58-76.
- Ratcliffe, J. H., Taylor, R. B., & Fisher, R. (2021). Conflicts and congruencies between predictive policing and the patrol officer's craft. *Policing and Society*. <https://doi.org/10.1080/10439463.2019.1577844>
- Reiner, R. (1992). Policing a postmodern society. *The modern law review*, 55(6), 761-781.
- Reiner, R. (2010). *The politics of the police* (4. ed.). Oxford University Press, New York
- Reiss, A. J. (1971). *The police and the public*. New Haven: Yale University Press.
- Rennstam, J. (2021). *Mellan bögskämt och prideparader: Inkludering och exkludering av homosexualitet i svensk polis*. Studentlitteratur AB: Lund.
- Reuter, P. (2009). Systemic violence in drug markets. *Crime, law and social change*, 52(3), 275-284.
- Reynald, D. M. (2010). Guardians on Guardianship: Factors Affecting the Willingness to Supervise, the Ability to Detect Potential Offenders, and the Willingness to Intervene. *Journal of Research in Crime and Delinquency*, 47 (3):358–90.
- Rinaldo, M. (2015). *Comparing crime hotspots and crime harm-spots in a Swedish City: a descriptive analysis*. (Master thesis). Cambridge: University of Cambridge.
- Rojek J., Martin P., & Alpert G. (2015). The literature and research on police–research partnerships in the USA. In Rojek J., Martin P., & Alpert G., (Eds.), *Developing and maintaining police-researcher partnerships to facilitate research use* (pp. 27-44). Springer, New York, NY.
- Rosenbaum, D. P. (2019). The limits to hot spots policing. In Weisburd, D., & Braga, A. A. (Eds.). *Police innovation: Contrasting perspectives*. Cambridge University Press: Cambridge.
- Rossi, P. H., Lipsey, M. W., & Henry, G. T. (2018). *Evaluation: A systematic approach*. Sage publications: California.
- Sampson, R. J. (2010). 'Gold Standard Myths: Observations on the Experimental Turn in Quantitative Criminology.' *Journal of Quantitative Criminology*, 26(4): 489–500.
- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277(5328), 918–928.
- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1998). *Neighborhood Collective Efficacy: Does it Help Reduce Violence?* US Department of Justice, Office of Justice Programs, National Institute of Justice.
- Sampson, R. J., & Wikström, P. O. (2008). The social order of violence in Chicago and Stockholm neighbourhoods: A comparative inquiry. *Order, Conflict, and Violence*, 97-119.

- Sarnecki, J. (1997). The dilemma of control, western perspectives. In Raska, E., & Saar, J. (Eds.), *Crime and Criminology at the End of the Century*. Tallin: Publishing Office of Estonian National Defense and Public Service Academy. Pp 36-49.
- Sarnecki, J. (2001). *Delinquent Networks: Youth Co-Offending in Stockholm*. Cambridge: Cambridge University Press.
- Sarnecki, J. (2010). Polisens prestationer – en ESO-rapport om resultatstyrning och effektivitet (Rapport 2010:3). Expertgruppen för studier i offentlig ekonomi. <https://eso.expert-grupp.se/rapporter/20103-polisens-prestationer-en-eso-rapport-omresultatstyrning-och-effektivitet/>.
- Sarnecki, J. (2019). *Stöta på patrull – en ESO-rapport om polisens problemorienterade arbete*. (Rapport 2019:6). Expertgruppen för studier i offentlig ekonomi. https://eso.expert-grupp.se/wp-content/uploads/2019/08/2019_6-stota-p%C3%A5-patrull-webb.pdf.
- Sarnecki, J. (2021). Forskningsöversikt inför utlysning av forskningsmedel av Vetenskapsrådet. Utkast av: *Kriminologi i framtiden. En översikt av svensk forskning om brottslighet under det senaste decenniet samt tankar om framtida behov*. Retrieved at: https://www.vr.se/download/18.5cd4d36517c3ece18fb460/1634115459992/UTKAST_Sarneckis%20forsknings%C3%B6versikt%202021-10-05.pdf
- Sharkey, P. (2010). The acute effect of local homicides on children's cognitive performance. *PNAS*, 107:11733–38
- Sharkey, P., Tirado-Strayer, N., Papachristos, A. V., Cybele Raver, C. (2012). The effect of local violence on children's attention and impulse control. *American Journal of Public Health*, 102(12):2287–93
- Sharkey, P., Schwartz, A. E., Ellen, I. G., & Lacoë, J. (2014). High stakes in the classroom, high stakes on the street: The effects of community violence on students' standardised test performance. *Sociological Science*, 1, 199-220.
- Shaw, C., and McKay, H. (1942). *Delinquency and Urban Areas*. Chicago: University of Chicago Press.
- Sherman, L. W., & Berk, R. A. (1984). The specific deterrent effects of arrest for domestic assault. *American sociological review*, 261-272.
- Sherman, L. W. (1992). *Policing Domestic Violence: Experiments and Dilemmas*. New York: Free Press.
- Sherman, L. W. (1998). *Evidence-based policing*. Washington, DC: Police Foundation.
- Sherman, L. W. (2007). The power few: experimental criminology and the reduction of harm. *Journal of Experimental Criminology*, 3(4), 299-321.
- Sherman, L. W. (2010). An Introduction to Experimental Criminology. In A. R. Piquero, & D. Weisburd (Eds.), *Handbook of Quantitative Criminology* (pp. 399-436). New York: Springer-Verlag.

- Sherman L. (2011). 'Police and Crime Control'. In Tonry M. (Ed.), *The Oxford Handbook of Crime and Criminal Justice*. Oxford, UK: Oxford University Press, pp. 509–537.
- Sherman, L. W. (2013). The rise of evidence-based policing: Targeting, testing, and tracking. *Crime and justice*, 42(1), 377-451.
- Sherman, L. W. (2020). The Cambridge Police Executive Program: Proportionality and Evidence-Based Policing against Harm. *Translational Criminology*, 12(3), 20.
- Sherman, L. W., & Cohn, E. G. (1989). The impact of research on legal policy: The Minneapolis domestic violence experiment. *Law and Society Review*, 117-144.
- Sherman, L. W., Gartin, P. R., & Buerger, M. E. (1989). Hot spots of predatory crime: Routine activities and the criminology of place. *Criminology*, 27(1), 27-56.
- Sherman, L. W., Gottfredson, D. C., MacKenzie, D. L., Eck, J., Reuter, P., & Bushway, S. (1997). *Preventing crime: What works, what doesn't, what's promising? A report to the United States Congress*. Washington, DC: National Institute of Justice.
- Sherman, L., Neyroud, P. W., & Neyroud, E. (2016). The Cambridge crime harm index: Measuring total harm from crime based on sentencing guidelines. *Policing: a journal of policy and practice*, 10(3), 171-183.
- Scarpa, S. (2015). *The spatial manifestation of inequality: Residential segregation in Sweden and its causes* (Doctoral dissertation). Växjö: Linnaeus University Press.
- Skogan, W. G., Hartnett, S. M., Bump, N., & Dubois, J. (2009). *Evaluation of ceasefire-Chicago*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.
- Skogan, W. G. (1992). *Disorder and decline: Crime and the spiral of decay in American neighborhoods*. University of California Press: Berkeley & Los Angeles.
- Skolnick, J. (1994). *Justice Without Trial: Law. Enforcement in Democratic Society*, 3rd Ed., pp. 41–68. New York: Wiley.
- SOU 2021:49. Utredningen om kommunernas brottsförebyggande ansvar (2021). *Kommuner mot brott. Betänkande av Utredningen om kommunernas brottsförebyggande ansvar*. <https://regeringen.se/49d3d4/contentassets/4b2d8adb90b2481c8d552e99bfdb060b/kommune-mot-brott-sou-202149.pdf>
- SOU 2011:35. Bättre insatser vid missbruk och beroende. -Individen, kunskapen och ansvaret. *Slutbetänkande av Missbruksutredningen* (2011). <https://www.regeringen.se/49b6a2/contentassets/0c778ea424b749b89225617e54558413/battre-insatser-vid-missbruk-och-beroende-del-1-av-2-forord-och-kapitel-1-12-bilaga-1-5-sou-201135>
- Sousa, W. H., & Kellin, G. L. (2019) Advocate: Of “Broken Windows” Criminology and Criminal justice. In Weisburd, D., & Braga, A. A. (Eds.) *Police innovation: Contrasting perspectives*. Cambridge: Cambridge University Press.

- Spelman, W. (1987). *Problem-oriented policing*. US Department of Justice Washington, DC: National Institute of Justice.
- Sturup, J., Rostami, A., Mondani, H., Gerell, M., Sarnecki, J., & Edling, C. (2019). Increased gun violence among young males in Sweden: A Descriptive National Survey and International Comparison. *European Journal on Criminal Policy and Research*, 25(4), 365-378.
- Sutherland, A., Brunton-Smith, I., & Jackson, J. (2013). Collective efficacy, deprivation and violence in London. *British Journal of Criminology*, 53(6), 1050-1074.
- Sutherland, E. H. (1939). *Principles of criminology* (3rd ed.). Philadelphia, PA: Lippincott.
- SvD 2019, Svenska dagbladet 20190405. Retrieved from: <https://www.svd.se/sa-ska-thornberg-losa-polisens-kris>.
- Svensson, K. (2010). Performing caring power in a scandinavian welfare state. *Revista De Asistentia Sociala*, (3), 49-58. Retrieved from <https://www.proquest.com/scholarly-journals/performing-caring-power-scandinavian-welfare/docview/749408157/se-2?accountid=12249>
- Swedish Government (2021). Ny statistisk visar på rekordnivåer av antalet polisanställda. Article on Swedish government website 26/1 2021. Retrieved from: <https://www.regeringen.se/artiklar/2021/01/ny-statistik-visar-pa-rekordnivaer-av-antalet-polisanstallda/>
- Swedish National Police (2017). *Utsatta områden* [Disadvantaged areas]. Stockholm: Swedish National Police.
- Swedish National Police (2021). *Lärdomar av encrochat. Sammanfattande rapport*. Translates to: Lessons learned from encrochat, concluding report. Underrättelseavdelningen. NOA. A193.902/2021. Polismyndigheten.
- Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review*, 22, 664-670.
- Taniguchi, T. A., Ratcliffe, J. H., & Taylor, R. B. (2011). Gang set space, drug markets, and crime around drug corners in Camden. *Journal of Research in Crime & Delinquency*, 48(3), 327-363.
- Tankebe, J. (2019). In their own eyes: An empirical examination of police self-legitimacy. *International Journal of Comparative and Applied Criminal Justice*, 43(2), 99-116.
- Telep, C. W., Mitchell, R. J., & Weisburd, D. (2014). How much time should the police spend at crime hot spots? Answers from a police agency directed randomized field trial in Sacramento, California. *Justice quarterly*, 31(5), 905-933.
- Thacher, D. (2019). Critic: The limits of procedural justice. In D. Weisburd & A. A. Braga (Eds.), *Police innovation: Contrasting perspectives* (2nd ed.), pp. 95-118. Cambridge: Cambridge University Press

- The Guardian 2021. Sweden's gun violence rate has soared due to gangs, report says. 26 May 2021. Retrieved from: <https://www.theguardian.com/world/2021/may/26/fatal-shootings-have-risen-in-sweden-despite-fall-across-europe-report-finds>.
- Tham, H. (1995). Drug Control as a National Project: The Case of Sweden. *Journal of Drug Issues*, 25(1), 113–128. <https://doi.org/10.1177/002204269502500108>
- Tremblay, A., Herz, D. C., & Kraus, M. (2020). The Los Angeles Mayor's Office of Gang Reduction and Youth Development Comprehensive Strategy. Los Angeles, CA: The Los Angeles Mayor's Office of Gang Reduction and Youth Development Research.
- Tompson, L., Belur, J., Morris, J., & Tuffin, R. (2017). How to Make Police–Researcher Partnerships Mutually Exclusive. In Knutsson J., & Tompson L. (Eds.), *Advances in Evidence-Based Policing*. London, UK: Routledge, pp. 175–194.
- Tyler, T. R., & Meares, T. L. (2019). Advocate: Procedural Justice Policing. In Weisburd, D., & Braga, A. A. (Eds.), *Police innovation: Contrasting perspectives*. Cambridge University Press.
- Volpe, M. R., & Chandler, D. (1999). *Resolving conflicts in institutions of higher education: Challenges for academics*. CNCR-Hewlett Foundation Seed Grant White Papers. 8. Retrieved at: <https://readingroom.law.gsu.edu/seedgrant/8> <https://readingroom.law.gsu.edu/cgi/view-content.cgi?article=1007&context=seedgrant>
- Wilhelmsson, M., Ceccato, V., & Gerell, M. (preprint.). What effect does gun-related violence have on the attractiveness of a residential area? The case of Stockholm, Sweden. Retrieved from <http://urn.kb.se/resolve?urn=urn:nbn:se:kth:diva-291240>
- Webster, D. W., Whitehill, J. M., Vernick, J. S., & Parker, E. M. (2012). *Evaluation of Baltimore's Safe Streets Program: Effects on attitudes, participants' experiences, and gun violence*. Baltimore: Johns Hopkins Center for the Prevention of Youth Violence.
- Weerman, F. M., Lovegrove, P. J., & Thornberry, T. (2015). Gang membership transitions and its consequences: Exploring changes related to joining and leaving gangs in two countries. *European Journal of Criminology*, 12(1), 70–91.
- Welsh, B. C. (2019). Evidence-based policing for crime prevention. In D. Weisburd & A. A. Braga (Eds.), *Police Innovation: Contrasting Perspectives* (Second edition, pp. 439–456). Cambridge, United Kingdom: Cambridge University Press.
- Weisburd, D. (2008). Place-Based Policing. *Ideas in American Policing*, (9), 1–16.
- Weisburd, D. (2015). The Law of Crime Concentration and the Criminology of Place. *Criminology*, 53 (2): 133–157. doi:10.1111/1745-9125.12070.
- Weisburd, D., Green, L., & Ross, D. (1994). Analyse spatiale des crimes commis sur la rue à l'intérieur des marchés de drogues. *Criminologie*, 27(1), 49–67.
- Weisburd, D., & Green, L. (1995). Policing drug hot spots: The Jersey City drug market analysis experiment. *Justice Quarterly*, 12(4), 711–735.

- Weisburd, D., & Mazerolle, L.G. (2000), "Crime and disorder in drug hotspots: implications for theory and practice in policing", *Police Quarterly*, 3 (3), pp. 331-49.
- Weisburd, D., Bruinsma, G. J., & Bernasco, W. (2009). Units of analysis in geographic criminology: Historical development, critical issues, and open questions. In Weisburd, D., Bernasco, W., Bruinsma, G. J. N. (Eds.), *Putting crime in its place: Units of analysis in geographic criminology* (pp. 3-31). New York, NY: Springer.
- Weisburd, D., & Neyroud, P. (2011). *Police Science: Toward a New Paradigm*. Cambridge, MA: Harvard University. <https://www.ncjrs.gov/pdffiles1/nij/228922.pdf>.
- Weisburd, D., Groff, E. R., & Yang, S. M. (2012). *The Criminology of Place: Street Segments And Our Understanding of the Crime Problem*. Oxford: Oxford University Press.
- Weisburd, D., & Telep, C. W. (2014). *Police and the Microgeography of Crime*. D: Washington, DC: *Inter- American Development Bank*, 2014.
- Weisburd, D., Groff, E. R., & Yang, S. M. (2014). The Importance of Both Opportunity and Social Disorganization Theory in a Future Research Agenda to Advance Criminological Theory and Crime Prevention at Places. *Journal of Research in Crime and Delinquency*, 51(4), 499–508. <https://doi.org/10.1177/0022427814530404>
- Weisburd, D., Eck, J. E., Braga, A. A., Telep, C. W., Cave, B., Bowers, K., ... & Yang, S. M. (2016). *Place matters*. Cambridge: Cambridge University Press.
- White, M. D., Gaub, J. E., & Todak, N. (2018). Exploring the potential for body-worn cameras to reduce violence in police–citizen encounters. *Policing: a journal of policy and practice*, 12(1), 66-76.
- Wilson, W. J. (1987). *The Truly Disadvantaged: The Inner City, the Underclass and Public Policy*. Chicago: University of Chicago Press.
- Wikström, P.-O. H. (1990). *Brott och åtgärder mot brott i stadsmiljön*. Stockholm: Brottsförebyggande rådet.
- Wikström, P.-O. H. (1998): Communities and crime. In Tonry, M. (Ed.), *The Handbook of Crime and Punishment*. New York: Oxford University Press.
- Wikström, P.-O. (2004). Crime as Alternative. Towards a Cross-Level Situational Action Theory of Crime Causation. In McCord, J. (Ed.): *Beyond Empiricism: Institutions and Intentions in the Study of Crime. Advances in Criminological Theory*. New Brunswick: Transaction.

- Wikström, P.-O. H. (2005) The social origins of pathways in crime: Towards a developmental ecological action theory of crime involvement and its changes. In Farrington, D. P. (Ed.), *Integrated developmental and lifecourse theories of offending. Advances in criminological theory*, vol 14. New Brunswick: Transaction.
- Wikström, P.-O. H., & Loeber, R. (2000). Do disadvantaged neighborhoods cause well-adjusted children to become adolescent delinquents? A study of male juvenile serious offending, individual risk and protective factors, and neighborhood context. *Criminology*, 38(4), 1109-1142.
- Wikström, P.-O. H., & Sampson, R. J. (2003). Social Mechanisms of Community Influences on Crime and Pathways in Criminality. In Lahey, B. B., Moffit, T. E., & Caspi, A. (Eds.), *Causes of Conduct Disorder and Juvenile Delinquency*. Guilford Press: New York.
- Wikström, P.-O. H., Ceccato, V., Hardie, B., & Treiber, K. (2010). Activity fields and the dynamics of crime. *Journal of Quantitative Criminology*, 26(1), 55-87.
- Wikström, P. O. H., & Treiber, K. (2016). Social disadvantage and crime: A criminological puzzle. *American Behavioral Scientist*, 60(10), 1232-1259.
- Wikström, P. O. H., & Treiber, K. (2017). Beyond risk factors: an analytical approach to crime prevention. In *Preventing crime and violence* (pp. 73-87). Springer, Cham.
- Wikström, P.-O., & Treiber K. (2018). The Dynamics of Change. Criminogenic Interaction and Life-Course Patterns of Crime. In Farrington, D. P., Kazemian, L., & Piquero, A. (Eds.), *The Oxford Handbook of Developmental and Life-Course Criminology*. Oxford: Oxford University Press.
- Willis, J. J., & Mastrofski, S. D. (2018). Improving policing by integrating craft and science: What can patrol officers teach us about good police work? *Policing and Society*, 28(1), 27-44.
- Wo, J. C. (2019). Mixed land use and neighborhood crime. *Social Science Research*, 78, 170-186.

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