Problem-oriented Policing & Intelligence-led Policing: Can these policing models reinforce each other?

Literature review
Module: Policing Models
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Introduction

Already in 1829 a police commissioner in London stressed that the primary role of the police is the prevention of crime (Mayne, 1829). Crime prevention is pivotal to current modern policing (Tilley, 2008). According to Weisburd and Eck (2004), modern approaches are gaining more and more attention in policing policy and daily practise in policing. But the standard approach where the police respond to crime information from the public and investigate each offence is still popular today. Several scholars including Eck and La Vigne (1994), Tilley (2008) and Goldstein (1979) pose critical arguments against this standard model of policing. Tilley (2008) for instance calls this way of policing: “non strategic and without long-term objectives (p.373)”. It could be compared to the brigade, having extinguished a fire and moving on to the next incident that requires attention. Additionally in this standard model decisions are based solely on experience and that is - according to Eck and La Vigne (1994) - no longer acceptable. Rational decision-making requires valid information, which the public and their elected officials will accept. Former Commissioner of the Metropolitan Police Stevens (2001) used a metaphor to stress the need to replace the standard-reactive model of policing:

“Being a policeman in de 21st Century is like being the man who was standing on the bank of a very fast flowing river. In that river he could see hundreds of people being swept along struggling to stop from drowning. As each moment passes their numbers swell until there are thousands of people all gasping and shouting to the man on the bank to help them. What do we do as police officers? Go in and help as many as we can? Or do we take a walk upstream and find out who is throwing them all in? I have a feeling that most of the time police have been wading in to the rescue! And so begins a reactive cycle of uncontrolled demands and equally uncoordinated response. The police become like lifeguards frantically swimming against the tide from one incident to another, employing different tactics in a disjointed and unfocussed manner with little or nothing to show for it at the end of the day (p.3)”.

Contemporary approaches such as problem-oriented policing (POP) and intelligence-led policing (ILP) aim to replace the standard model of policing (Tilley, 2008). Versteegh, Van der Plas and Nieuwstraten (2010) note that till the last turn of the century these modern strategies seemed to be independent and contradictory. In their policy and daily practise police organisations tend to choose for one specific strategy rather than opting for two or three strategies. However in the last years, based on scientific research, there is a change towards a more combined use of modern approaches. A change of course where certain police organisation are choosing for POP and ILP in their policy and daily practise. An example of this can be found in the Dutch National Police strategy, where the police force is choosing for strong elements of POP and ILP in their current organisation design (Kwartiermaker Nationale Politie, 2012). In addition Tilley (2003) suggested that police officers believe that POP and ILP are closely related to one another or are even identical. Ratcliffe (2008) states that POP and ILP can benefit from each other. Despite these arguments, there are others who could not link these models and there apparently seems to be confusion as well about the
similarities and compatibility of POP and ILP (James, 2013; Treverton, Wollman, Wilke, & Lay, 2011). This gives the impression that the scientific literature is not yet clear on this matter.

The goal of this literature review is to obtain a better understanding of POP and ILP. It aims to describe the two models and to explore their similarities and contradictions. In addition, this review means to explore where both models can reinforce each other and if these two approaches are compatible. Hence, this leads to the following main research question:

Which key elements can we distinguish regarding problem-oriented policing and Intelligence-led policing in the scientific literature, and can these policing models reinforce each other?

The scientific literature, on which this review is based, has been selected using predetermined search criteria. These search criteria are directly related to problem-oriented policing, intelligence-led policing, similarities and contradictions between these two models, combined use and compatibility of these approaches. The databases used for this review are the library of the Canterbury Christ Church University, the library of the Police academy of the Netherlands and Google Scholar. It is important to note that there is a lot of variation and proliferation in literature on both models. This review attempts to use the most current and fundamental literature, even though there is more literature about this on this subject matter.

This introductory chapter aims to clarify the relevance and central research question of the literature review. The following chapter lays out the key elements of the policing models POP and ILP, after which, the similarities and differences will be described. The third chapter discusses from different points of view (based on theoretical perspectives and practical circumstances) where POP and ILP can reinforce each other and if they are compatible. The final chapter aims to answers the main research question of this review.
Problem-oriented Policing & Intelligence-led Policing

*Problem-oriented Policing*

In the late 70s, the awareness arose that the demand on police had become overwhelming. Until then the police was focused on responding to every call, instead of looking at underlying problems (Tilley, 2008). Policymakers and researchers became more interested in improving the effectiveness of policing. Over the years this has resulted in several new ideas that stimulated the problem solving way of thinking. These ideas include, a large part of the community problems where the policing is facing with are not police (crime) related and the traditional ‘arrest and persecution’ way of policing is not always effective to resolve problems. This changed the perspective on policing (Center for Problem-oriented Policing a, n.d.). Goldstein (1979) was an early criticaster of the responsive manner of policing and highlighted the shortcomings of this model. In his studies ‘improving policing: a problem-oriented approach’ (1979) and ‘Problem-oriented policing’ (1990) Goldstein laid the foundations for POP. In the 80s people started with several experiments, primarily in the USA where at that time POP was widely adopted. Since then many police agencies all over the world continued to experiment with POP (Center for Problem-oriented Policing a, n.d.; Hale, Heaton, & Uglow, 2010).

As described in the foreword of ‘problem-oriented policing; Reflections on the first 20 Years’ POP emphasises on the broad range of problems that community expects the police to handle, including problematic groups, individuals and specific spots in the area (Scott, 2000). The ultimate goal of the police is not simply to enforce the law, but to effectively solve the underlying problems. Primarily the focus in solving is on developing new preventive and pro-active approaches instead of old school responding or repression (Scott, 2000). POP can be applied in various levels of policing like community and cross-border crimes, but also in various police agency levels (Center for Problem-oriented Policing b, n.d.). According to Bullock, Erol and Tilley (2006), POP requires a process in which the problem will be identified, the problem will be understood, new approaches will be developed and an evaluation focused on effectiveness will be included. A lot of research has been carried out into the effectiveness of POP. For example, in an evaluation study of policing models in the Netherlands Van Os (2008) conclude that POP is the most effective and efficient model in the Dutch context.

Goldstein’s approach has been elaborated by Eck and Spelman’s (1987) SARA model. The SARA model is widely accepted and adopted by police agencies that implement, organise and practise POP. This model consists of four elements. In short these are Scanning (to identify the recurring problems), Analysis (to collect and analyse all relevant data on the problem), Response (to seek out responses that might have worked elsewhere and then selecting and implementing approaches that will resolve the problem) and Assessment (to seek out if the response reduced the problem and to identify new strategies that might better work) (Center for Problem-oriented Policing c, n.d.). In addition to the SARA model, the PAT model is used
to determine what the problem exactly is. PAT stands for *Problem Analysis Triangle* and invites those who are looking at problems to consider three elements that all problems have: an offender, a victim and location. These three elements can help to understand (analysis) the problem (Eck & Clarke, 2013).

Research in the literature has yielded no specific uniform definition of POP. Goldstein (2001), who has had explicit influence on the development of POP, defines POP as follow:

“Problem-oriented policing is an approach to policing in which discrete pieces of police business (each consisting of a cluster of similar incidents, whether crime or acts of disorder, that the police are expected to handle) are subject to microscopic examination (drawing on the especially honed skills of crime analysts and the accumulated experience of operating field personnel) in hopes that what is freshly learned about each problem will lead to discovering a new and more effective strategy for dealing with it (n.p.)”.

*Intelligence-led Policing*

A small number of prolific offenders are responsible for the majority of crimes and offenders tend to increasingly operate in networks. Tilley (2008) notes that despite this, the police fail to address systematic sources and patterns. Again, an important reason for this was that the police were mainly focused on responding to crime incidents. In 1993 the (British) Audit Commission published: *Helping with Enquiries: Tackling Crime Effectively*. A couple of years later this problem was mentioned again by another influential report from Her Majesty’s Inspectorate of Constabulary (HMIC): *Policing with Intelligence* (1997), published from an operational police perspective. Both reports plead for a more proactive approach, targeting the criminal not the crime instead of the crime and making more and better use of intelligence. These papers have had great influence and helped to stimulate the development of ILP. Following these publications ILP has been adopted by an increasing number of police forces (Amey, Hale, & Uglove, 1996). ILP became a significant movement in the beginning of the twenty-first century (Ratcliffe, Intelligence-Led Policing, 2008). The Kent Police (England) has long been the main pioneer of ILP and was the first police force to put into practise comprehensive ILP. This was initiated, implemented and conducted by Sir Phillips, who was at the time Chief Constable of Kent Police (John & Maguire, 2003).

Tilley (2008) describes ILP as a way of smart policing. The aim and function of the police remain unchanged and are guaranteed, but the way of policing is definitely changed towards a more proactive focus. It does not really discuss what policing is. It strengthens the police focus on law enforcement and implicitly targets lawbreakers and criminals. ILP involves developing and maintaining a detailed and up-to-date picture of patterns of crime to enable based decision-making and to intervene as effectively as possible in order to disrupt networks and remove prolific offenders. Decision-making is one of the ILP key elements. But in, for example, the Netherlands special attention is given to accessing and analysing information and much less for decision-making (Hengst den, 2010). According to Ratcliffe (2008), we can...
speak of “true ILP” when the following components exist: the crime intelligence analyst must interpret the criminal environment, the analyst must then use that intelligence to influence the minds of the decision-makers, and then decision-makers must direct resources effectively in order to have a positive impact on the criminal environment. The sum of these components is called the 3-i model.

James (2013) claims that ILP seems to have reached its development climax with the National Intelligence Model (NIM). The NIM had become the major vehicle for conducting ILP and claims to represent the collected wisdom and best practises in ILP and law enforcement (NCIS, 2000). Ratcliffe (2008) describes that the NIM is designed to professionalise intelligence practise and to integrate criminal intelligence into the central framework of police business and decision-making. This model is seen as a key factor in the development of ILP. The NIM comprises different levels, which together can identify criminals and crime patterns; in order to interpret information and to make evidence based decisions. It distinguishes three interconnecting levels: local issues, cross-border issues and serious and organised crime (National Centre for Policing Excellence, 2005).

ILP is an evolving concept that during the last couple of years has changed towards a more crime and problem-solving focus (Hale, Heaton, & Uglow, 2010). These two elements are strongly embraced in POP (Oakensen, Mockford, & Pascoe, 2002). Hale, Heaton & Uglow (2010) call this the “revisionist approach to intelligence-led policing (p. 304)”. Ratcliffe (2008) defines ILP in the light of the philosophical revision that have occurred in recent years and with a broader definition of intelligence:

“Inelligence-led policing is a business model and managerial philosophy where data analysis and crime intelligence are pivotal to an objective, decision-making framework that facilitates crime and problem reduction, disruption and prevention through both strategic management and effective enforcement strategies that target prolific and serious offenders (p. 89)“.

**Similarities and differences**

Viewed from an abstract point of view, POP en ILP appear to converge. But when one zooms in and focuses more on details, these points of converge appear to consist of significant differences. The following part of the review will focus on the most general similarities and significant differences, although obviously not every similarity and difference can be taken into account.

Where POP in first instance was embraced more in the United States of America, ILP was applied more in England (Ratcliffe, 2008; Center for Problem-oriented Policing -a, n.d.). POP and ILP have both arisen from a pressing demand for more effective and efficient policing. In addition, both models strive for more evidence based policing (Tilley, 2008). But if we consider the two definitions we have used earlier in this review, there seems to be a major
difference in their emphasis. Ratcliffe (2008) defines ILP as a business model, managerial philosophy and a decision-making framework. Goldstein (2001) defines POP as an approach to policing, focused on discrete parts of police business, to discover effective strategies for solving problems. It becomes evident that ILP focuses more on a standard organisational mechanism and how it supposed to function, for example the business model and uniform decision frameworks. POP is usually defined according to its goal, tackling operational recurring problems, and with emphasis more on the practical specific methods to solve a problem that the community expects the police to handle (Ratcliffe, 2008; Center for Problem-oriented Policing, 2001; Clarke & Eck, 2003).

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Problem-oriented Policing</th>
<th>Intelligence-led Policing</th>
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</thead>
<tbody>
<tr>
<td>Originate</td>
<td>United states of America</td>
<td>United Kingdom</td>
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<tr>
<td>Driver</td>
<td>More efficient and effective policing</td>
<td></td>
</tr>
<tr>
<td>Definition emphasis</td>
<td>Practical specific methods to solve problems</td>
<td>Standard organisational mechanism/ how it supposed to function</td>
</tr>
<tr>
<td>Tactic focus</td>
<td>Repeat offenders, repeat offences, hotspots and repeat victims</td>
<td></td>
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<tr>
<td>Underlying conception</td>
<td>Pareto 80/20 rule</td>
<td>6/60 result summarised after criminal career research</td>
</tr>
<tr>
<td>Type of problem</td>
<td>Police related problems, also when they are not directly police related</td>
<td>Police related problems</td>
</tr>
<tr>
<td>Approach (scope)</td>
<td>Law enforcement</td>
<td>All approaches that can solve their problem</td>
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<tr>
<td>Partnership</td>
<td>Key role by solving problems</td>
<td>If stimulates law enforcement</td>
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<tr>
<td>Evidence based</td>
<td>Information, analysis and intelligence</td>
<td></td>
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<tr>
<td>Focus information collection and analysis</td>
<td>Identifying police-relevant problems for the community</td>
<td>Prolific and serious offenders and their networks</td>
</tr>
<tr>
<td>Emphasis data gathering</td>
<td>Identifying police-relevant problems for the community</td>
<td>Covertly collected information from informants</td>
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Table 1: POP & ILP Similarities and Differences

Tactically both models mainly focus on prolific offenders, repeat offences, hotspots and repeat victims. The underlying conception for this is for POP Pareto’s 80/20 rules and for ILP the 6/60-result, summarised from criminal career research (Versteegh, Nieuwstraten, & Van der Plas, 2010; Ratcliffe, 2008). According to Ratcliffe (2008) both models try to address many of the same problems. But there is a significant difference. POP has a broader scope and includes aproblems that are not directly police related (Scott, 2000). In addition ILP also has a greater emphasis on law enforcement than POP (Ratcliffe, Intelligence-Led Policing, 2008). Unlike ILP, POP is equally if not more interested in finding approaches that require enforcement. POP is interested in all approaches that can solve problems and does not want to reduce opportunities straight from the start (Braga, 2002). Furthermore Tilley (2008) notes
that ILP cooperates with partners if that specifically stimulates law enforcement, whilst POP cooperation and partnership has a key role and depends on the nature of the problem (Bullock, Erol, & Tilley, 2006).

ILP and POP are using information, analysis and intelligence more systematically than the old fashioned way of policing. Both models use this as basis for making founded decisions and understanding problems (Tilley, 2008). Unlike POP, ILP puts the analyst explicitly in the process. The focus of information collection and analysis in ILP is aimed more at prolific and serious offenders and their networks (Ratcliffe, Intelligence-Led Policing, 2008). With POP the focus is more on identifying police-relevant problems for the community and analysing this information for problem solving (Bullock, Erol, & Tilley, 2006). Research in the scientific literature appears to show different emphases regarding data gathering. ILP requires in its analysis an important role for covertly collected information from informants, where POP requires an explicit role for the community (partners). Table 1 highlights a series of similarities and difference between ILP and POP.
Reinforcement & Compatibility

Reinforcement
Literature search has provides several quotes, which suggest that POP and ILP can in fact reinforce each other. Although authors tend use different perspectives and analyses, certain elements often come back. Ratcliffe (2008) for example describes that POP could benefit from a greater use of intelligence, whilst ILP could benefit from the strategic problem-solving capacities of POP. Versteegh, Van der Plas and Nieuwstraten (2010) consider this issue primarily from the NIM and Sara perspective. They conclude that the NIM would give POP a broader scope, whilst Sara gives ILP more resolving power. To be able to draw a full conclusion concerning this issue more consideration is required.

The position and use of intelligence needs to be discussed. According to Cukier and Mayer-Schönberger (2013) data and intelligence are becoming more important and play an increasingly determining role in the fight against crime. In addition, Den Hengst (2010) argues that intelligence must be given a more predominant place in the entire decision-making process of the policing organisation. She says that intelligence must be as important to the police as it is to the commercial sector. Intelligence does in fact play an important role in POP and is mainly focused on specific issues. In addition there is an increasing interest in better deploying intelligence. An example of this is that Ratcliffe’s (2008) 3-i model is also used in POP literature for better intelligence analysis (Eck & Clarke, 2013). But POP is a multi-level approach and is applied for local problems as well as global problems. More often, problems are cross connected between different levels, for instance in the case of transnational crime. POP does not directly provide in the connection between different levels of intelligence (Kop & Klerks, 2009). As the major vehicle for conducting ILP, the NIM can provide a broader connected view starting from the local and cross-border level all the way up to serious/organised crime (Versteegh, Nieuwstraten, & Van der Plas, 2010). In addition, the NIM also provides in a uniform decision-making framework, something that POP and Sara do not provide immediately (John & Maguire, 2004).

As described earlier in this review, partnerships and problem solving have explicit roles in POP (Bullock, Erol, & Tilley, 2006; Goldstein, 1990). Nevertheless, there are several signs indicating that ILP, but mainly the NIM, would embrace these elements as well. Oakensen, Mockford and Pascoe (2002) conclude that the NIM must be used more creatively. They describe that the NIM has the potential to enable the police to work more effectively with partners in shared assessments, problem analysis, strategy and implementations. However it is the responsibility of the police to recognise this potential. Also Tilley (2008) and Ratcliffe (2008) confirm the impression that ILP (NIM) would embrace more partnership and problem-solving focus. Furthermore they describe that also in the phase of data analysis partnerships are desirable and can have a positive influence on the effectiveness and accountability. The Lancashire constabulary has integrated the Sara model into the NIM to remain the problem solving focus in practise (Bullock, Erol, & Tilley, 2006; John & Maguire, 2004). All this indicates
that up until now ILP (NIM) does not provide enough in partnerships and practical problem solving. Therefore it appears that the POP philosophy can accommodate more partnership and problem-solving focus in the ILP (NIM) business model and managerial philosophy. In addition, the potential of POP for ILP mainly consists of the involvement of partners at an early stage and the practical direct problem solving power of the Sara method.

Several studies show that in practise ILP and POP regularly deal with a lack of training and measurements of results. In addition, most of the time these studies advise essential improvements on these two elements. The case study into the effectiveness of Police intelligence management in New Zealand concludes that not only intelligence staff must receive training, but commanding officers need to as well (Ratcliffe , 2006). The practical implementation of POP experienced that training in problem-solving techniques needs to be provided (Leight , Read , & Tilley, 1998). To prove that police strategies are effective, it is crucial to measure results. This frequently fails in practise, therefore POP and ILP recognized that improvement on this point is really necessary (Skogan, 2008; Bullock, Erol, & Tilley, 2006; John & Maguire, 2004). It seems if POP and ILP want to reinforce each other, improvement of training and improvement of measurement results must be been seen as critical key success factors.

**Compatibility**

There is a marked conceptual shift visible in the literature on the use of policing models. Where initially policing models were described and considered from their independent and contradictory origin, the current movement is focussing more on the combined use. Several authors like Clarck and Eck (2003), Ratcliffe (2008), Scott, Eck, Knutsson and Goldstein (2008) notice that a combination of different policing models could lead to a more effective approach and better results. But sound arguments why a combination of models is required are often missing. Authors such as Tilley (2008), Radcliffe (2008), Weisburd and Eck (2004) argued some time ago that the limitations of the standard model were the main reasons to replace this standard way of policing and to introduce modern models like POP and ILP. But are the modern models in autonomous and independent use now also too limited? Straver (2008),who also supports the combined use of modern policing models, claims that this is part of the constant development of the police. According to Jones and Newburn (2002), seeking for new approaches is mainly part of continuity that taking place in contemporary policing systems. In seeking to explain this shift, it seems that autonomous and independent use of POP or ILP does not lead to satisfaction. On top of that the conceptual shift is remarkable because it has previously been argued that the combined use of POP and ILP leads to practical confusion (James, 2013; Treverton, Wollman, Wilke, & Lay, 2011) and it is also unclear whether this can be achieved in practice without sacrificing the “whole force commitment” required for each style (Hale, Heaton, & Uglow, 2010; Leight , Read , & Tilley, 1998). Also Skogan (2008) noted that widespread support, commitment and understanding are required to reform policing styles successfully.
Despite the current shift towards a more combined use of policing models, the question is whether POP and ILP allow for enough space to be combined? Tilley (2003) outlines that POP allows for space for the intelligence-led enforcement approach. But space for POP is difficult to find in ILP as a business model and managerial philosophy. In the previous chapter it became clear that some key elements are contradictory. For instance, ILP does not allow any space for POP to solve problems, which are not directly police related. But besides that POP is also limited in considering broad opportunities that can solve problems, because ILP has a limited view on law enforcement approaches (Braga, 2002; Scott, 2000). This gives the impression that ILP has a narrowing influence on POP, which requires for the release of key elements to create space and flexibility so that both models can be combined.
Conclusion

Both models appear to have reinforcing elements for each other. ILP (NIM) can provide POP with a multi-level connected and broader view on crime related problems. In addition ILP (NIM) can also provide in a uniform-decision framework, something that POP does not directly have to offer. POP (Sara) can provide ILP with more involvement of partners (in an early stage) and more practical problem solving power. In spite of these reinforcing elements improvement of training and improvement of outcome measurement, appear to be critical success factors in order to obtain a certain level of reinforcement.

The combined use of POP and ILP is stimulated in the academic literature. This is remarkable because the combination has already led to practical confusion and the question really is if the combined use can be achieved without widespread commitment. In addition it appears that ILP has a narrowing influence on POP and this requires the release of key elements to create space and flexibility so that both models may be combined.

Even though the combined use of POP and ILP is stimulated and although it appears that both models can reinforce each other on various points, it must be taking into consideration that a lack of pre conditions, such as commitment, space for each other, training and outcome measurements, could result in not obtaining reinforcement and less effective policing.
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References


