Hot Spots Policing in New Zealand: A Mixed Methods Study on Police Officer Perspectives

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Abstract

This study explores the attitudes of police officers in New Zealand towards hot spots policing. Hot spots policing is a place-based crime prevention strategy which entails a focused police response at high crime locations. The study focuses on exploring the attitudes of police officers towards the specific strategy of increasing police visibility (heightened patrol levels) at these locations. Data collection was carried out using a mixed methods approach comprising of a principally quantitative online questionnaire supplemented with semi-structured interviews with police officers. Through utilising a purposive sampling approach, a total of 164 participants completed the questionnaire and interviews were conducted with three police officers. Analysis techniques encompassed a series of independent samples t-tests to analyse the quantitative data as well as a thematic analysis to identify patterns and themes within the qualitative data. The findings indicate that police officer attitudes towards hot spots policing are complex. Although most officers expressed moderate support for hot spot policing as a crime prevention strategy, they simultaneously identified numerous limitations of the strategy. Some frustration was also expressed towards certain organisational factors and the current implementation of the strategy in an operational context. The research also found that officers expressed a level of resistance towards the integration of evidence-based decision making in the policing environment. This thesis explores a subject that remains a largely under-researched area, both overseas and in New Zealand. However, further research is required in order to develop further insights into police officer attitudes and to inform policy and practise in the future.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed:

Date: 31/05/2022

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Ethics Approval

Approved by the Auckland University of Technology Ethics Committee on 13/05/2021, AUTEC Reference number 20/414.

Chapter One: Introduction

1.0 Overview

Hot spots policing is a proactive police strategy used by police departments to reduce crime (Weisburd, 2005). There is considerable evidence suggesting that a visible police presence, targeted to specific locations, can reduce crime (Braga et al., 2019; National Research Council, 2004; Telep & Weisburd, 2012). However, there is currently a gap in the literature, with very few studies exploring police officer perspectives towards the strategy. This research aims to help bridge a gap in the literature by exploring the attitudes of police officers towards hot spots policing in New Zealand. This chapter will firstly introduce the study by providing some background and context in relation hot spots policing, followed by the research aims and question. The significance of the study and the structure of the thesis will then be discussed.

1.1 Background of the study

Over the last three decades, notable developments and changes have occurred within the policing environment. One major development is the rise in evidence-based policing practises. This can be defined as integrating the use of scientific evidence, evaluation and analysis into policing to help inform decision making (Lum & Koper, 2015). This is commonly used to evaluate the effectiveness of police practises and crime prevention strategies (Lum & Koper, 2015). One popular evidence-based strategy is hot spots policing. This can be defined as strategically focusing police resources at high crime locations (Braga et al., 2014). A hot spot could be a single address, street or a block of buildings (Telep & Weisburd, 2018). Researchers commonly identify hot spots through analysing police data and crime mapping technology to produce heat maps. These maps ultimately outline areas where incidents of crime are heavily concentrated (Weisburd & Lum, 2005). Within the policing environment, it is becoming common practise for police to strategically utilise this data and deploy resources to these locations (Sherman & Weisburd, 1995). One popular strategy is to simply increase police presence within a hot spot location, most commonly by patrolling the area (by means of vehicle or foot patrols). Several studies have found that that having a heightened level of police presence can deter and prevent crime (Koper, 1995; Braga et al., 2019; National Research Council, 2004; Telep & Weisburd, 2012).

The current literature on hot spots policing highlights crime control benefits, with numerous studies indicating that it is effective at reducing crime and disorder (Braga et al., 2019; National Research Council, 2004; Telep & Weisburd, 2012). On the other hand, several studies have noted some limitations. In particular, there have been concerns with potential unintended consequences of the strategy, such as the displacement of criminal activity (Rosenbaum, 2006).

Displacement can be defined as the relocation of crime to another time or place (Johnson et al., 2012). In relation to hot spots policing, it is a general concern that having an increased police presence within one location will simply cause a motivated offender to change their tactics and relocate (Sherman et al., 1995; Rosenbaum, 2006; Braga et al., 1999). Therefore, although hot spots patrols may reduce the level of crime at the hot spot location, it may not help to reduce overall crime levels across the wider district (Rosenbaum, 2006). Furthermore, Rosenbaum (2006) states that another limitation of hot spots policing is that it may be detrimental to police and community relations, particularly for minority communities. Having a heightened police presence increases the likelihood of increased arrests and traffic enforcement within a location, which may hold the risk of potentially damaging police and community relations (Rosenbaum, 2006).

Although there are numerous studies on the effects of hot spots policing, there is a lack of research focusing on police officer attitudes towards the strategy. This is problematic, as the success of this strategy ultimately relies upon the cooperation and commitment of the police officers on the ground (Lum, 2009). Due to the authoritarian structure of police organisations, this means that strategies are often implemented through a top-down style of management (Chan, 1997). This means that lower-ranking officers are provided information and expected to be committed to their deployment (Haberman, 2016). Previous research on police officer receptivity towards evidence-based policing suggests that some police officers can be resistant towards evidence-based strategies and researchers in the police environment (Kalyal, 2020; Taylor, Kowalyk and Boba, 2007). Furthermore, studies have also found that police officers can be sceptical of implementing evidence-based policing strategies, sometimes disregarding the research, and relying on their own personal experiences for decision making (Palmer et al. 2011; Hunter et al, 2015; Lum & Koper, 2017). Although several attitudinal studies have focused on receptivity to evidence-based policing in general, there are very few attitudinal studies focusing on the specific strategy of hot spots policing (Wain et al., 2017; Haberman & Stiver, 2019; Haberman 2016; Mugari & Thabana, 2018). The findings of the studies have revealed police officers can be supportive of hot spots policing (Haberman & Stiver, 2019; Haberman 2016; Mugari & Thabana, 2018). However, other studies highlight that some police officers may be sceptical of the strategy (Ratcliffe & Sorg, 2017; Haberman & Stiver, 2020; Wain et al., 2017). Some critiques of hot spots patrols include displacement (Sherman et al., 2014), foot patrols being resource intensive (Haberman & Stiver, 2020) and officers disliking the routinization of their patrols in the area (Wain et al., 2017). Furthermore, Ratcliffe and Sorg (2017) found that officers highly disliked foot patrols in a hot spot and preferred patrolling in a vehicle. Therefore, the mixed findings of these studies highlight that a well-founded conclusion cannot be reached regarding police officer attitudes. In order to achieve full commitment and cooperation from police officers, it is important to understand their perspectives and include them within decision

making processes (Chan, 1997; Haberman & Stiver, 2019; Center for Court Innovation, 2009; White et al., 2018). Although hot spots policing a strategy implemented by the New Zealand police, no studies thus far have explored police officers' attitudes towards the strategy.

1.2 Hot Spots Policing Experiment in New Zealand

The present research will focus on the attitudes of police officers working within a hot spots pilot experiment implemented by the New Zealand Police, designed by the New Zealand Evidence Based Policing Centre (NZEBPC). The pilot trial is implemented across two districts in New Zealand: Waitemata and Bay of Plenty. A formal hot spots policing foot patrol program was designed by researchers and implemented over 12 months in 2020. Researchers conducted an analysis of the total calls for service data within those particular districts. The crime types included within the analysis included dishonesty offences (burglary and theft), violent offences, as well as drug and disorderly offending. Through the use of Geographic Information System (GIS) crime mapping technology, twenty hot spot locations within each district were identified. As part of the experiment, half of these hot spots were then randomly assigned to experimental conditions, being heightened levels of police presence at these locations. Police officers in the districts were instructed to patrol each hot spot location on foot for 15 minutes at a time, multiple times throughout their shift. The other half of the hot spot locations formed the control group of the trial, therefore did not receive any change in police presence. The aim of the experiment was to investigate whether having a heightened police presence can be attributed to a reduction of crime at these locations. This thesis study will employ purposive sampling to recruit the police officers that are currently working within the experiment. This is to ensure that the officers will have the relevant knowledge and have had experience conducting hot spots policing.

1.3 Research Question

This study seeks to explore and understand the attitudes of police officers towards doing hot spot patrols in New Zealand. To date, most of the studies have been conducted overseas, with a prime focus on evaluating the effects on levels of crime and disorder. However, the voices of police officers have been somewhat absent throughout the literature on hot spots policing. Currently, there are no studies undertaken on hot spot policing in New Zealand, despite these strategies becoming increasingly popular within the New Zealand police context. The present study seeks to answer the question: What are the attitudes of police officers towards hot spots policing in New Zealand?

1.4 Study significance

The study seeks to contribute to the current literature that exists on hot spot policing, not only in New Zealand but from an international context. The current study will draw upon aspects of hot spots policing, that has not yet been examined by previous research. This includes understanding the attitudes of police officers towards hot spots policing as a crime prevention strategy (including their perspectives on displacement), statistics guided policing, as well as the effects on the community. Therefore, the study seeks to not only examine the knowledge and attitudes of police officers in relation to hot spots patrols but also understand their acceptance of the tactic.

Secondly, the study employs a mixed methods approach; being two primary data collection methodologies to increase the reliability and validity of the data. The first method of data collection includes a quantitative online survey. This was issued to approximately one thousand police officers throughout the Waitemata and Bay of Plenty Districts working within the pilot program in New Zealand. The questionnaire included a set of 14 attitudinal statements based on key elements of hot spots policing and foot patrols. Once analysis of the survey data was completed, a qualitative aspect, being a series of semi-structured interviews with frontline police officers were conducted. This was to elaborate more extensively on their attitudes and to expand on some of the results from the questionnaire. The qualitative data was be analysed using an inductive thematic analysis. Many of the previous studies on hot spots policing have been a primarily quantitative methodology. Therefore, a mixed methods approach ultimately triangulates two sets of data to help compare and to strengthen the findings (Heale & Forbes, 2013).

Through exploring the attitudes of New Zealand police officers toward the use of hot spot policing, the study will help to address the current gap in the literature as well as provide value for policy and practise, particularly within the New Zealand Police. This may have potential benefits for not only the New Zealand Police organisation, but the communities that the police officers serve. The research ultimately provides a platform for police personnel to share their perspective and feedback on a policing strategy that currently affects them. Not only is it crucial that police understand the relevant dimensions of directed patrol delivery in relation to crime prevention theory, but it is also important that police are emotionally committed to the patrol delivery in the most effective manner possible. The research could also potentially be reviewed by the New Zealand police to help improve and guide future hot spots policing strategies in the future.

1.5 Thesis Composition

The thesis will consist of five chapters. Chapter one above has provided the introduction to the study. The intention of this chapter was to set the context of this research study. It introduced the research question, presenting the background context of the study, key definitions and emphasised the importance and significance for this research, particularly within the New Zealand context.

Chapter two includes an extensive review of the literature on hot spots policing. The chapter begins with an overview of the theoretical background of hot spots policing, including its historical context. A review of the literature on police officer attitudes and perspectives will then be discussed, including attitudes towards evidence based policing and hot spots policing.

Chapter three presents the research design and methodology utilised in the study. It discusses the two methods used to collect primary data from police personnel in New Zealand, consisting of an online survey and a series of semi-structured interviews. The chapter provides a detailed description and rationale or each method, as well as a comprehensive overview of the data collection and analysis processes, the sampling methods used and ethical elements.

Chapter four discusses the results from the data analysis. It presents the key findings from the online survey and semi-structured interviews.

Chapter five is a comprehensive discussion which will include the interpretations of the findings and their relation to key theories and existing literature. Implications for policy and practise are also discussed

Chapter six concludes the study. It presents the major findings of the study, the limitations of the study as well as recommendations for future research.

Chapter Two: Literature Review

2.0 Introduction

Since the 1990's, notable developments in police and crime prevention research have resulted in various innovations within the policing environment (Braga & Weisburd, 2010). Two major innovations include the rise in evidence based policing and hot spots policing. The innovation of evidence-based policing was developed as a result of the American crisis in policing during the 1990s, which saw crime rates rising and a declining public confidence in traditional policing. Evidence-based policing is simply a method of decision making, using scientific research and evaluation processes to guide policing (Lum & Koper, 2017). Hot spots policing was designed as an evidence-based strategy due to the reliance on crime data analysis to identify relevant locations (Braga et al., 2019). There is currently evidence to suggest that hot spots policing does have crime control benefits (Braga et al., 2019; National Research Council, 2004; Telep & Weisburd, 2012). On the other hand, other studies have discussed some downfalls and limitations of the strategy (Rosenbaum, 2006; Haberman 2016). In terms of attitudinal studies related to hot spots policing, there is a substantial gap in the literature, with only few examining the perspectives of officers (Wain et al., 2016; Ratcliffe & Sorg, 2017; Haberman & Stiver, 2020; Mugari & Thabana, 2018).

This section will first discuss the literature on hot spots policing, for the purpose of providing key definitions as well as background context. It will also discuss the relevant criminological theories relating to hot spots policing. In section two, a more comprehensive review of police officer receptivity towards research and evidence-based policing practises, including attitudes towards hot spots policing, will be discussed. These two sections will provide a comprehensive review of the current literature on hot spots policing and will ultimately signify the gaps that the current study seeks to fill.

2.1 Historical context

Evidence-based policing strategies, including hot spots policing was developed as an improved response to the standard policing model during the 1990's (Sherman, 2013). The standard policing model was developed during the 1930's professional era of policing, encompassing traditional reactive strategies used by police. Traditional police strategies include patrolling in a vehicle around random areas (no concentrated effort on high crime areas), a rapid response to calls for service, and increasing arrests and enforcement activity (Lum & Koper, 2015). These tactics were the standard daily practises for police officers. However, later studies on these tactics found that they had very little impact on reducing crime and disorder rates (Kelling et al.,

1974; Weisburd & Eck, 2004). For instance, one study conducted by Kelling et al. (1974) examined the effectiveness of patrols around random locations. They found that random patrols had no effect on reducing crime and disorder rates in an area. This finding ultimately caused widespread confusion and frustration across police departments and scholars, as random patrolling was viewed as the primary prevention tool used by police (Kelling et al., 1974). Therefore, hot spots policing was developed as a proactive evidence-based strategy to maximise the use of technology and police resources to reduce crime.

2.2 Hot Spots Policing

Hot spots policing was developed as a response to the rise in place-oriented crime prevention strategies. Place based crime prevention ultimately prioritises crime prevention efforts at places with high rates of crime (Eck & Weisburd, 1995). The hot spots perspective states that crime incidents are not evenly distributed across urban environments, rather they are heavily concentrated in small areas of geography, referred to as hot spots (Braga et al., 2014). For instance, Sherman et al. (1989) analysed police calls for service data for dishonesty offending (robbery and theft) and sexual crimes in Minneapolis. They found that a large majority of these crimes were concentrated in a small number of locations, with over half (50.4%) of the calls for service being dispatched to only 3 percent of addresses. In turn, police and policymakers sought utilise police resources more efficiently, determining strategies that could be focused on hot spots. Therefore, the term "hot spots policing" was used to describe focused police strategies taking place at these high crime locations (Weisburd and Telep, 2014).

The current literature on hot spots policing suggests that 'hot spots' are defined in various ways. For instance, some have referred to hot spots as small micro areas, being single addresses or street corners (Eck and Weisburd, 1995; Sherman et al.,1989), however others refer to larger street blocks with a high crime concentration (Weisburd and Green, 1994). However, a simple understanding is that a hot spot is a location that generates a significant proportion of crime and disorder events (Eck et al., 2005). Focusing police resources on geographical areas is not unfamiliar to the policing environment, as certain police beats were traditionally a determining factor for scarce resource allocation and police deployment (Weisburd and Telep, 2014). Although placing police officers at these locations may be an old and well-founded idea, the idea of systematically focusing on high crime locations to prevent crime is relatively new (Braga et al., 2014). This is mostly due to the recent advancements in technology and crime mapping software that allows police departments and researchers to identify hot spot locations more accurately and effectively (Weisburd & Lum, 2005). In recent years, hot spots patrols have become increasingly popular amongst police departments around the world, particularly the United States (Police Executive Research Forum, 2008). For example, 90 percent of police

departments in the United States regularly used hot spots mapping and strategies to address crime (Police Executive Research Forum, 2008).

2.3 Effects on Crime

Numerous studies indicate that hot spots policing can have an effect on crime (Braga et al., 2019; National Research Council, 2004; Telep & Weisburd, 2012). A Campbell Collaboration systematic review conducted by Braga et al. (2019) synthesised empirical evidence on the effects of focused strategies at crime hot spots. They reviewed 65 studies on hot spot policing, which consisted of 78 experiments including randomised controlled trials and quasiexperimental tests. Most studies that were included within the review (n= 51) were conducted in the United States. The findings demonstrate that over half of the hot spots strategies generated small reductions in rates of crime and disorder. These reductions were especially true for specific offence categories, such as: drugs, disorder, property, and violence (Braga et al., 2019). Another piece of evaluation research was conducted by the National Research Council (2004) to review the effectiveness of different policing strategies. They concluded that the studies which focused police resources at high crime hot spots provided the most robust evidence of police effectiveness. Similarly, Telep and Weisburd (2012) conducted a systematic review on the current police evaluation literature. They found that there is sufficient evidence to suggest that focused interventions, such as hot spots policing, can reduce crime. Therefore, they concluded that police practitioners should focus their efforts on hot spots; whilst avoiding traditional police practises such as random patrols. Overall, these systematic reviews provide evidence to suggest that hot spots policing can be an effective police strategy for reducing crime and disorder.

Hot spots policing and its potential crime prevention benefits is supported by various criminological theories. Firstly, hot spots policing emerged from the theoretical foundations of environmental criminology. This perspective suggests that crime can be prevented through focusing on the characteristics of the environment in which the crime takes place (Brantingham & Brantingham, 1995). Criminal opportunity theories can also be used to understand the rationale behind hot spots policing. These include classical deterrence theory (Beccaria, 1764; Bentham, 1971); rational choice theory (Cornish & Clarke, 1987) and routine activity theory (Cohen & Felson, 1979). Classical criminology, in particular deterrence theory, strongly relates to hot spots policing. This theory posits that individuals are rational decision makers, and there needs to be some risk of punishment to deter them from committing crime (Beccaria, 1764; Bentham, 1781). Similarly, rational choice theory implies that offenders are often rational and will commit crime when the benefits ultimately outweigh the costs (Cornish & Clarke, 1987). This theory is often used in combination with routine activities theory. Routine activities theory suggests that in order for a crime to occur, there needs to be three elements: a motivated offender, a suitable target (which can include people, items or places) and the absence of a

capable guardian (which is usually the presence of a person which can help deter crime). When these three elements converge at a certain time or space, crime is more likely to occur (Cohen & Felson, 1979). These theories imply that crime can be prevented through the manipulation of certain elements, such as removing an accessible target or providing more guardianship. Hot spots patrols ultimately increases police guardianship within a hot spot, simultaneously increasing the perceived risk of arrest which can generate a deterrent effect (Koper, 1995).

2.4 Implementing Hot Spots Policing

One limitation of the hot spots policing literature is that studies have rarely been specific regarding what exactly officers should be doing at the hot spots. There are various strategies that can be used to address hot spots, including: proactive arrests, problem-oriented policing or simply increasing the police presence at the hot spot (Braga et al., 2019). One of the most common approaches to hot spots policing is the latter; to simply increase police time spent in the hot spot location (Braga et al., 2019). However, there are very few studies that examine how much time officers should spend at a hot spot location and the exact tasks they should be carrying out. This lack of detail regarding what strategies officers should be doing at hot spots has also been downfalls in both the implementation and evaluation of hot spots policing (Haberman, 2016). Often, the strategies that are used at the hot spot is left to the discretion of the police officers, which has ultimately caused problems with the evaluation of hot spots policing experiments (Haberman, 2016; Telep & Weisburd, 2012).

Hassall and Lovell (2015) described the elements of a successful intervention. Certain key elements include: a full adherence to the design of the experiment, a consistent dosage (amount of the intervention) and quality delivery. However, it is evident that some hot spots policing interventions have failed on meeting these criteria. For instance, in the Minneapolis hot spots policing experiment, researchers noted that there were inconsistent strategies deployed at hot spots (Sherman & Weisburd, 1995). Some police officers simply parked the patrol vehicle within the hot spot and were reading newspapers inside their patrol car. On the other hand, some officers were actively engaging with the community and conducting foot patrols (Sherman & Weisburd, 1995). Similarly, other hot spots policing interventions noted concerns when it came to evaluating the intervention, as researchers were unable to identify which police strategies produced the reduction of crime in the area (Haberman, 2016; Telep & Weisburd, 2012). Furthermore, the ambiguity of hot spots policing was described by Haberman (2016) as a "black box" (p.490). This is because there is a range of approaches and strategies across different hot spots policing interventions. Therefore, this ambiguity with not only defining a hot spot, but also the implementation of hot spots policing, is a limitation throughout the literature.

One study that has provided detailed guidance into specific police strategies at hot spots is the research conducted by Koper (1995). Koper analysed the optimal times for patrol stops within a hot spot, through the analysis of observational data. This data was collected during a hot spots policing experiment, in which 17 thousand police hot spot visits were observed. A survival analysis method was utilised to find out whether a longer duration of patrol would produce greater crime reduction effects. They found police patrols need to be a minimum of 10 minutes, with the optimal patrol length being 15 minutes. Furthermore, since deterrence peaked at 15 minutes, if the patrol were to carry on any longer, it would ultimately be ineffective and have diminishing effects (Koper, 1995). This theoretical understanding can ultimately help inform and maximise police resources, mainly through keeping patrols short and frequently rotating them on a repetitive but unpredictable basis (Sherman, 1990). Although Koper's study provides some detailed insight into the dosage of patrols, the study has limitations. Firstly, it does not specify the exact strategies that officers should be employing at the hot spots. Furthermore, a study by Telep et al (2014) tested the effects of 15-minute police patrols. They found that the crime reduction effects can vary in different locations as the patrols did not always have a deterrence effect (Telep et al., 2014). Overall, although Koper's findings may not be generalisable across all interventions, it still provides a valid and specific insight into potential strategies used at hot spots.

2.5 The Limitations of Hot Spots Policing

Although there is evidence to suggest that hot spots policing is effective at reducing crime and disorder, some studies highlight the limitations of the strategy. Firstly, Rosenbaum (2006) critiques the use of police patrols as a crime control strategy, stating that the impact on crime is smaller than the impact on disorder, and the effects may be only short-term. This suggestion relates to Sherman's (1990) crackdown theory, which indicates that the reduction in crime after any police enforcement is small and is likely to decay. For instance, in an experimental test of drug raids in Kansas City, crime rates initially dropped during the experiment, however returned to pre-experimental levels only seven days after the intervention (Sherman et al., 1995). This short-lived impact was highlighted by the authors, stating "Like aspirin for arthritis, the painkiller does nothing to remedy the underlying condition" (Sherman et al., 1995, p. 777). This highlights that hot spot policing may have limitations, in regards to having only a temporary effect on crime levels.

2.6 Displacement and Diffusion of Benefits

Furthermore, there are concerns related to the unintended consequences of hot spots policing, such as the displacement of criminal activity (Rosenbaum, 2006). Displacement can be defined as simply relocating crime to another time (temporal displacement) or place (spatial displacement) (Johnson et al., 2012). Spatial displacement is the phenomena most referred to, in

terms of moving crime from the experimental area to another area (Johnson et al., 2012). The current evidence is mixed and inconclusive on the issue of displacement when it comes to hot spots policing. In a systematic review, Braga et al (2014) found that in most experiments, the chance of spatial and temporal displacement was low. They stated that although displacement may be likely, when compared to the crime reduction gains, it is ultimately outweighed (Braga et al., 2014). Moreover, some studies found that a diffusion of crime control benefits (crime reduction effects extending to the immediate areas surrounding the hot spot location) is more likely to occur than displacement (Braga et al., 2012; Clarke & Weisburd, 1994).

Although these studies have found that the effect of displacement to be relatively small when compared to the crime prevention gains, there are several limitations with the studies. Firstly, most hot spot experiments do not define or measure the extent of displacement accurately (Rosenbaum, 2006). The evidence on diffusion of benefits may also have limitations, including problems with implementation (police officers patrolling the surrounding areas) and a confusion around the specific target boundaries (Rosenbaum, 2006). Moreover, there is a body of evidence that suggests that displacement does occur as an effect of police crackdowns (Sherman et al., 1995; Rosenbaum, 2006; Braga et al., 1999). In summary, the literature on displacement is inconclusive, as there are numerous displacement types that have not been adequately or effectively measured. Therefore, this highlights the need for future hot spots experiments to not only measure crime levels, but also have a reliable method for analysing displacement. This would add strength to the current body of hot spots policing evidence.

2.7. Lack of Problem-Solving Approaches

One limitation of hot spot policing interventions is the heavy reliance on calls for service or arrest data, with hot spot maps mostly created to inform decision making (Rosenbaum, 2006). However, one limitation of relying on this data is that it is limited to reported crime in the community. Research has indicated that a large proportion of crime goes unreported in society (Biderman & Reiss, 1967). Therefore, some locations may be susceptible to high levels of crime, however due to a relatively low reporting rate, the statistics are not reflected within police data. Thus, these locations may fall short to receive an adequate share of police resources, which could potentially be a limitation of using police data to inform targeted police responses.

Another critique of hot spot policing is that police departments tend to conduct a weak problem analysis (Rosenbaum, 2006). Goldstein (1990) states that too often, police departments use a very superficial and weak problem analysis, which is a leading contributor to short-lived crime reductions. To have a sustainable and long-term impact on crime, it is crucial that police departments devote time and effort into understanding the underlying problems and factors behind what causes an area to be a hot spot (Goldstein, 1990). Instead of focusing entirely on

calls for service or arrest data, police departments can strengthen their approach to hot spots through triangulating the police data with census, survey, interview, and observational data. This would ultimately make the analysis more effective and lead into stronger and more tailored responses to a problem (Rosenbaum, 2006). Therefore, this reinforces that without a comprehensive problem analysis phase, policing interventions such as hot spot policing may be superficial and standardised, which can lead to a very small or no effect on crime (Rosenbaum, 2006)

Similarly, another limitation is the shallow implementation of hot spots policing. Rosenbaum (2006) states that police departments tend to implement standard responses, resorting to strategies such as patrols and traffic enforcement. These strategic responses have been deemed as predictable and narrow rather than utilising problem-solving principles to develop a tailored, evidence-based strategy that focuses on the long-term reduction and elimination of the problem (Goldstein, 1990; Rosenbaum, 2006). Furthermore, community policing and problem-oriented policing literature highlights the importance of using more problem-solving methods to reduce crime for the long term (Goldstein, 1990; Greene, 2000; Rosenbaum, 2006). Problem-oriented policing focuses on developing a range of tailored responses to the problems identified within the analysis stage. Some examples could include: a coordinated police response with different agencies, changing the design of the physical environment, or working closely with the community to gain a better insight into the problem at hand (Braga, 2008). Rosenbaum (2006) states that police departments are not implementing the vast range of criminological and problem-solving theory into practise; rather police departments are still resorting to traditional and standard police responses. Therefore, the standard police responses of patrols and traffic enforcement that many police are using to address hot spots seem to be at odds with the body of literature on problem-oriented policing (Goldstein, 1990; Rosenbaum, 2006).

2.8 Risk of Aggressive Enforcement

Rosenbaum (2006) states that another problem with hot spots policing is that some approaches such as increasing arrests and traffic enforcement has a risk of potentially damaging police and community relations. Aggressive policing tactics can ultimately divide the police and the community, as it runs the risk of the public starting to feel targeted (Rosenbaum, 2006). Moreover, hot spots policing also has a risk of becoming abusive policing, as officers may feel increased pressure to make arrests, and seize contraband (Rosenbaum, 2006). As a result, this can have detrimental effects on attitudes toward police. If police are seen as an occupying force within hot spot communities, this may in turn, cause complaints about unfair targeting (Rosenbaum, 2006). Having police credibility threatened is a severe consequence for police departments. This is because the success of policing relies heavily on citizen

cooperation, trust in confidence in police and police legitimacy (Rosenbaum, 2006; Tyler, 2001). Furthermore, violent and drug hot spots are more likely to occur within low income, minority communities (Rosenbaum, 2006). Due to the heavy reliance on crime data, it is possible that hot spots policing could contribute to a disproportionate police presence within these areas (Rosenbaum, 2006). This could have unintended consequences, as minority populations are more likely to have lower levels of trust and confidence in police when compared to non-minority communities (Rosenbaum et al., 2005). Therefore, having a disproportionate police presence in vulnerable communities could potentially decrease public trust and confidence and increase feelings of being treated unfairly (Rosenbaum, 2006).

Part two: Attitudes of Police Officers

2.9 Introduction

Although there is substantial evidence hot spot policing and its effects, the literature on police officer receptivity to the strategy remains limited. In recent years, evidence-based practises, such as hot spots, are proven to be an important tool for guiding police strategies (Braga et al., 2014). The potential of evidence-based policing strategies is well established. For instance, Sherman (1998) believes that using scientific evidence on 'what works best' is the most powerful tool that can be used in policing. Despite this, there still remains a relatively low uptake of evidence-based strategies within police departments (Telep & Lum, 2014). As police officers are essentially the implementers of these strategies, it is crucial to gain full investment and cooperation from officers on the ground (Lum, 2009). Furthermore, other studies have found that police officers are commonly resistant towards adopting important innovations, such as community policing and problem-oriented policing (Braga & Weisburd, 2006). Therefore, to bring evidence-based policing strategies, such as hot spots, into the forefront of policing, it is important to understand the attitudes of officers towards these innovations (Telep & Lum, 2014). This section will firstly discuss the literature on police officer attitudes towards researchers and evidence-based policing. It will then move on to discuss the current literature focused specifically on the attitudes of police officers towards hot spot policing.

2.10 Attitudes Towards Crime Analysts

Crime analysis is paramount to evidence-based policing practises, including hot spots policing and its implementation. Due to technological advancements, including crime mapping software, crime analysts are now common within the policing environment, analysing crime patterns and producing reports and findings in which ultimately guide policy and practise. This is particularly true for hot spot policing, which is driven by crime mapping software (Braga et al., 2019). There are currently a small number of studies that explore police officer attitudes towards crime analysts in the policing environment. These studies are highly relevant to the current study as the insights can help to understand officer receptivity toward strategies being guided by researchers. One study conducted by Cope (2004), explored the receptivity of officers towards intelligence led policing. The findings suggested that there was a considerable cultural divide between police officers and analysts. This was mainly due to as a lack of communication regarding what analysts do. Similarly, analysts commonly misunderstood the work of police on the ground. Another study, conducted by Taylor, Kowalyk and Boba (2007) explored the perceptions of crime analysts regarding their integration within the police organisation. The main findings suggest that analysts believe they were supported and appreciated by

management, however they received less support from ground level officers. Furthermore, analysts stated that they rarely communicate or interact with the police officers and believed that the officers seldom utilise their products. Furthermore, a study conducted by Telep and Lum (2014) surveyed the police officer use of crime statistics across three police departments. They found a variation across each department, with some agencies utilising crime statistics more often than others. However, they concluded that while some officers are using crime statistics, the majority are not. Therefore, the findings from these studies suggest that there is evidence of a considerable gap between research teams and police officers.

2.11 Attitudes Towards Evidence Based Policing

There is also a small but growing body of literature relating to police officer receptivity to evidence-based policing strategies. One of the earliest experiments based on domestic violence was conducted by Sherman and Berk (1984). The police officers taking part in the experiment were sceptical towards generalising research to every case, thus the officers generally resorted to using experience over research evidence to guide decisions. Moreover, the lack of police cooperation to the strategy ultimately caused implementation issues, with officers at times disregarding the randomisation processes of the trial (Sherman & Berk, 1984).

Studies have revealed that generally higher-ranking officers are more likely to be receptive toward evidence-based policing strategies, although they also have a high tendency to rely on personal experience to guide decision making (Palmer et al, 2011; Hunter et al, 2015; Lum & Koper, 2017). For instance, a study conducted by Palmer et al (2011) surveyed a group of high-ranking officers in the UK, including inspectors and chief inspectors on their views toward using evidence-based policing practises. The officers were generally supportive of using crime statistics to evaluate an evidence-based strategy. However, they also found that officers relied upon their own knowledge, experience rather than research to guide operations. Similarly, Hunter et al (2015) surveyed middle managers and higher-ranking police leaders to examine the extent to which they use research to guide their decision making. The findings suggest that most of the officers perceived research to be a valuable tool in decision making. However, they found that over 80 percent of the officers made decisions solely based on personal judgement and experience. These studies indicate that although higher-ranking officers may be receptive to the idea of bringing research into policing, they are more likely make decisions based on prior knowledge and experience rather than rely on research (Lum & Koper, 2017).

Research has also examined the receptivity of lower-ranking officers towards research and evidence-based policing. Studies have found that these officers are generally supportive of evidence-based policing strategies. However, on the other hand they also strongly support traditional policing tactics. For instance, Telep and Winegar (2016) explored the receptivity to

evidence-based policing among officers in Oregon. Similar to higher-ranking officials, officers were generally receptive toward the idea of merging research into policing. However, they did place an emphasis on the reliance of experience to guide daily operations. Although they found that officer views on hot spots policing aligned with the current literature, they also viewed traditional tactics, being random patrols and rapid response to emergency calls to be effective. These traditional approaches were being routinely used by the agencies as a strategy to prevent crime. These views are ultimately in in conflict with the current policing literature, as there is a lack of evidence to suggest that these traditional tactics are effective (Telep & Weisburd, 2012). Similarly, Telep and Lum (2014) examined lower-ranking officer receptivity to evidence-based policing across three police departments in the US. They found that the views of officers were ultimately conflicting with the current evidence. For instance, officers were largely sceptical of using evidence-based policing strategies such as hot spot policing and believed that traditional tactics, including random patrols were more effective at reducing crime. Another study, by Jenkins (2016) examined the acceptance of police officers toward innovative and traditional policing tactics in the US. The findings suggest that officers were supportive of community policing strategies' and believed that crime mapping was important for a department. However, similar to the findings of previous studies, they also expressed a strong support towards traditional policing methods. Therefore, these studies suggest that generally, officers support the use of research in policing, however they tend to rely on their own knowledge and experience to guide decision making, as well as strongly supporting traditional policing strategies for daily operations.

Other studies have sought to examine the factors that influence attitudes of officers towards research and evidence-based policing. Telep (2017) examined the factors in which predict frontline officer's receptivity to evidence-based policing across four US police departments. They found that having prior exposure to research and educational attainment influenced receptivity to evidence-based policing. Furthermore, they found that rank also plays a role, as lower ranking frontline officers were less likely view strategies such as hot spots policing and problem-oriented policing to be effective. However, they also found that officer attitudes tend to vary considerably across every police department.

Another study by Kalyal (2020) explored the factors that lead to a resistance of evidence-based policing. They identified five major factors in which contribute to officer resistance. This includes: a lack of communication and training regarding evidence-based policing practises, a cultural resistance to research, a cultural gap between external researchers and police staff, a lack of resources, and political interference. Buerger (2010) also found that there is a disconnect between research and policing. Their findings suggest that research can be overly abstract and hardly relevant to the actual experiences of officers. This is because researchers and academics tend to hold radically differing definitions of what constitutes 'evidence of what works', with

researchers often focused on measurements and validity when it comes to designing experiments, whereas police officers tend to rely on personal experience (Buerger, 2010).

Overall, the literature on police officer receptivity reveals that there is currently a gap between research and police practise, with receptivity toward research and evidence-based policing varying across police organisations.

The body of literature suggests that officers (more so higher-ranking officers) are generally accepting of evidence-based policing, however they tend to heavily rely on personal experience and traditional methods to guide practise. This research is important, as evidence-based strategies, including hot spots policing, ultimately rely on the cooperation from officers to be successful. Therefore, it is important to understand the receptivity of officers to improve cooperation with these strategies (Telep, 2017). The fact that officer receptivity can vary across police departments ultimately highlights a strong need for similar research to be conducted in the New Zealand context. This study therefore seeks to address this major gap in the literature, to understand the views of New Zealand police officers towards the evidence-based policing strategy of hot spot policing.

2.12 Police Officer Attitudes Towards Hot Spots Policing

Overall, the literature on police officer receptivity towards the use of research and analysts in policing produces a valuable insight into how officers perceive evidence-based policing strategies. The strategy of hot spot policing is one of the most popular evidence-based policing strategies used within police departments around the world (Weisburd, 2003). This section will review the small body of literature on police officer attitudes towards hot spots policing.

The literature on the receptivity of officers towards hot spot policing generally suggests that officers acknowledge the benefits of the strategy, however they believe that it does come with limitations. One study conducted by Haberman (2016) explored the views of high-ranking police commanders towards hot spot policing. They found that the commanders largely relied on using hot spot patrols in their operations and perceived hot spot policing to be an effective policing strategy. The commanders' perspectives were aligned closely to common policing and criminological theories, noting that increasing police presence in crime hot spots is an effective target hardening strategy that can serve to disrupt offenders, generate deterrence, and educate victims.

Multiple studies have focused on the foot patrols, which involves the increasing the level of police presence on foot within a hot spot location (Ratcliffe et al., 2011; Ratcliffe & Sorg, 2017; Haberman & Stiver, 2020; Mugari & Thabana, 2018). Ratcliffe et al. (2011) conducted a hot

spot foot patrol experiment in Philadelphia. Upon observations and interviews with the officers, their experiment produced insights into police officer views toward the strategy. Firstly, officers held particularly negative views towards the foot patrols. The officer's preferred vehicle patrols, mainly due to the ability to cover a larger area and respond to more jobs. The findings suggest that officers believed that foot patrols were not "real police work" (Ratcliffe & Sorg, 2017, p.43). Officers believed that police work should encompass responding to different jobs, arresting criminals, and patrolling in a car (Ratcliffe & Sorg, 2017). Furthermore, the understaffing of the police department was a major factor in officers preferring vehicle patrols, as they believed the organisation did not have enough resources for officers to spend time on foot. Moreover, the officers highly valued reactive policing, such as random patrols and rapid response to emergency calls, over hot spot policing. They generally critiqued hot spot policing for resulting in temporal and spatial crime displacement, as the officer's believed that offenders had adapted their offending to their routines and schedules (Ratcliffe & Sorg, 2017).

Similarly, Haberman and Stiver (2020) explored the perspectives of police officers towards the Dayton hot spot foot patrol experiment. They found that officers were generally accepting of the foot patrols as they believed they could provide benefits such as: deterring offenders, improving relationships with the community, and improving intelligence. They found that the officers preferred foot patrols to be short and frequent rather than longer sustained periods. The officers also believed that hot spot foot patrols could have potential limitations. This included: being labour intensive, decreasing safety as well as potentially causing the spatial displacement of crime. Similarly, Mugari and Thabana (2018) conducted a study on police officer attitudes towards hot spots foot patrols in Zimbabwe. Their findings suggest that officers viewed foot patrols to be effective in reducing street level crimes, such as dishonesty offences. The increased police presence was also viewed by officers to have a positive effect on the community, including reducing the fear of crime. On the other hand, one study found that officers are not always receptive towards hot spot policing. Wain et al., (2016) examined the perspectives of UK police officers towards implementing hot spot patrols as part of a randomised experiment. They found that officers perceived these patrols negatively and they were particularly damaging for internal procedural justice. They found that the officers highly disliked the routines of 15minute patrols as they believed that it impeded their discretion.

Overall, upon a review of the current literature on police officer attitudes towards hot spots policing, the findings suggest that officers do acknowledge the benefits of hot spot policing, however the issue of displacement is a common critique (Ratcliffe & Sorg, 2017; Haberman & Stiver, 2020). Furthermore, some officers believe that the specific strategy of foot patrols is too labour intensive for under resourced police departments. Similar to the evidence-based policing literature, some officer's valued traditional tactics such as rapid response and random patrols

over hot spot policing (Ratcliffe & Sorg, 2017). However, there are considerable gaps in the literature. Firstly, there are a very small number of attitundinal studies conducted. With the lack of attitudinal studies in the hot spot policing field, it makes it difficult to draw any definitive conclusions regarding police officer attitudes. Secondly, there have been no studies conducted in the New Zealand context, with most studies conducted in the US (Ratcliffe & Sorg, 2017; Haberman & Stiver, 2016), United Kingdom (Wain et al., 2016) and Zimbabwe (Mugari & Thabana, 2018). Therefore, the current study seeks to address these gaps. Through exploring the attitudes of police officers in New Zealand, this will contribute to the hot spots policing literature and bring further insights into the attitudinal field.

2.13 Importance of the Study

As hot spots policing is implemented by police officers on the ground, it is crucial that they have full commitment to the strategy (Haberman & Stiver, 2019). To achieve full cooperation, police leaders and researchers should design interventions in line with organisational justice principles. This includes considering the perspectives of police officers (Haberman & Stiver, 2019; Center for Court Innovation, 2009; White et al.,2018). Understanding the views of police officers is essential, as this will ultimately lead to increased commitment to the strategy, thus leading to a more successful implementation (Haberman & Stiver, 2019). Research into policing and organisational justice reveals that officers are more satisfied with their job and have increased commitment to the department when they perceive that they are treated fairly (Cronin et al. 2017, Rosenbaum and McCarty 2017).

The authoritarian structure of police organisations means that changes are often implemented by a top-down style of management (Chan, 1997). This traditional hierarchical structure ultimately means that decisions are made from the top and subsequently communicated to lower ranking personnel with very little discussion or consultation (Haberman & Stiver, 2019). Police officers on the ground are simply briefed on what will be needed from them and expected to implement the intervention with fidelity (Haberman & Stiver, 2019). Ultimately this implementation process does not align with the literature on organisational justice (Cronin et al. 2017, Myhill & Bradford 2013). This is because the process ultimately restricts the perspectives of frontline staff, limiting any chance for staff to provide their views or feedback on a decision that affects them (Donner et al. 2015; Haberman & Stiver, 2019). This can have unintended consequences, with studies on police culture suggesting that internal change imposed from the top down can often be resisted by operational staff (Chan, 1997). Furthermore, police culture research indicates a significant cultural gap between management and street level officers. Street-cops tend to feel cynical and discontent towards their management, which can negatively impact jobsatisfaction, commitment, and communication (Chan, 1997). Therefore, to ensure a successful implementation of hot spot policing (or any research-based strategy), it is important to not only

include police in the decision-making process, but also to take the time to understand their views towards the strategy (Haberman, 2016). Through allowing police officers on the ground the chance to provide their perspectives and feedback, this can increase commitment and improve treatment fidelity (Haberman & Stiver, 2019; Center for Court Innovation, 2009, White et al., 2018). Therefore, this research is important as it provides officers the platform to share their feedback and perspectives on a hot spots policing strategy that affects them.

Chapter Three: Methodology

3.0 Introduction

This chapter provides an overview of the research methodologies used for the collection and analysis of the data. The study explores the attitudes of police officers toward the use of hot spot policing in New Zealand. In order to achieve the purpose of this study, a sequential-explanatory mixed methods design was employed, which involves two sequential phases: quantitative and qualitative. A mixed methods approach can be beneficial if the quantitative data collected requires an additional explanation (or further insight) into the topic (Bryman, 2016). Qualitative approaches are generally flexible and can help to generate a more comprehensive understanding of attitudes and perceptions (Lune & Berg, 2017). As the study focuses on the subjective experiences and attitudes of police officers, the research design ultimately seeks to capture their voices and explores their attitudes. The findings from the survey and interviews were then integrated and triangulated. Triangulation is the process of utilising several methods for collecting and analysing data (Heale & Forbes, 2013). Studies have found that triangulation serves to confirm and validate findings as well as overcome the limitations or biases arising from using just one method, which can help to enrich and provide clarity to the findings (Noble & Heale, 2019).

The research question which guided the study was: What are the attitudes of police officers towards hot spot policing in New Zealand? This chapter presents the methods used to collect primary data, the recruitment process employed to sample the population and the research instruments used. It also discusses the ethical considerations and processes that were followed to protect the participants.

3.1 Design of the study

A mixed methodology research design was employed for this study. The definition of a mixed methods approach is a process of data collection, analysis and the integration of both qualitative and quantitative findings. This has been deemed a useful approach to gain deeper understanding of the research question (Creswell & Cresswell, 2005). The sequential explanatory mixed methods design employs quantitative methods followed by qualitative methods; two distinct and sequential research phases (Ivankova et al., 2006). This section will discuss the quantitative phase of the research.

3.2 Quantitative phase: Online Survey

In the first phase of the study, a predominantly quantitative online survey was employed to collect data on the attitudes of New Zealand Police officers. Using this method provides statistical quantitative data on attitudes and perceptions by surveying a sample of a population, allowing inferences to be made on the perceptions and attitudes, which can help generalise results to the population (Creswell, 2009). Therefore, a survey was utilised to generate valuable attitudinal data.

3.3. Survey Instrument

In order to target a large number of police officers, an electronic Likert-scale survey was determined to be the most appropriate and efficient method for quantitative data collection. A complex variable such as attitudes are difficult to measure (Saunders, Lewis & Thornhill, 2000). However, it is theorised that attitudes have two elements: the direction and intensity (Albaum, 1997). For instance, attitudes can be predisposed towards something in a positive or negative direction and vary by intensity (David, 1960). The Likert scales were constructed on the assumption that the intensity of attitudes is linear therefore as a measurement format, it uses a series of statements that indicate levels of agreement or disagreement for direction as well as levels of strength (Albaum, 1997).

The survey for the current was developed based on a five-point Likert-scale, with an additional three optional qualitative questions. To solicit New Zealand Police officers' attitudes towards hot spot policing, a series of 20 questions were presented. These include 12 attitudinal statements, six demographic and three open text box questions. The respondents were required to answer the attitudinal statements in one of five ways:

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Questionnaire items were developed from an extensive literature review on the topic. Necessary modifications were made as a result of discussions with the New Zealand Police research panel. For example, question seven (Appendix A) was modified from a multi-choice to an open-ended question to allow respondents more flexibility and freedom in terms of their answers on timings. The structure of the survey was slightly altered, to change the demographic section from the

beginning to the last section. This was to allow police officers to focus on the first two sections, which covered their attitudes toward hot spot policing.

The attitudinal statements and demographic questions were then categorised into three sections of the questionnaire. Part one comprised of seven likert-scale statements and two qualitative questions. This section was developed to explore respondents' attitudes and perspectives toward the use of directed patrols as a policing strategy. Directed patrols is a common term used in New Zealand to describe the strategy of hot spot patrolling. Part two was designed to explore officers' opinions specifically toward the use of foot patrols as a policing strategy. Foot patrols are one specific strategy of hot spot patrolling. This section included five likert-scale statements. The final section related to respondent demographics and background information. This included four multi-choice questions, focusing on respondents age, New Zealand police rank, years of service within the Police and the characteristics of their policing area (urban or rural). For a full list of survey items, please refer to Appendix A.

3.4 Survey Participants

The survey respondents were New Zealand Police Officers. To obtain the most accurate data on police officer attitudes toward hot spot policing, purposive sampling was carried out in order to sample for a group of police officers that were actively involved in a hot spot policing initiative, implemented through the New Zealand Evidence Based Policing Centre (NZEBPC). This is a hot spot pilot trial, which was implemented in the Waitemata and Bay of Plenty regions. Hot spots were identified through crime mapping and spatial analysis, which researchers then required police officers to visit hot spot locations and conduct a foot patrol for 15 minutes at a time. For the purposes of the present study, these police officers were purposefully sampled on the basis that they have had active experience with conducting systematic hot spot patrols. Thus, the decision to purposefully sample and limit the survey to these police officers was to allow for the most valid and information rich data on attitudes toward hot spot policing.

The participants were recruited through the assistance of a gatekeeper, being the New Zealand Evidence-Based Policing Centre (NZEBPC). The researcher was provided a list of police officer email addresses involved in the hot spots trial. There were approximately one thousand email addresses, which subsequently helped to allow the researcher access to the participants.

3.5 Data Collection: Survey Implementation

Once the researcher received assistance from the NZEBPC in identifying the participants, the next stage was to distribute the survey. The survey was executed through Survey Monkey, which is an online survey portal. Conducting surveys online has several advantages. Firstly, they are convenient for both the researcher and participants. As the participants were from a

range of areas in Waitemata and Bay of Plenty, including rural police officers who were stationed in very isolated areas, the online survey allowed effective and quick access to all police officers. Having an online survey is convenient for respondents as they can complete the survey on their own schedule. This was especially important for the present study as police officers are often busy and short on time, thus having the online survey allows participants the flexibility and freedom to respond at their own pace. The platform of Survey Monkey was chosen as the host, on the basis that it ensured participant confidentiality. This online platform ensures participants remain anonymous, as there was no requirement to submit personal identifying information. It also ensured confidentiality as the respondents' data was stored on a secured and locked account, which could only be accessed by the researcher.

The survey questions were uploaded to Survey Monkey once they had been finalised. A sharing link was then generated, allowing respondents to access the survey. This ensured that the survey was limited to those that received the survey link. A survey pilot test was conducted before the survey was distributed. This was to test the survey, allowing the researcher to further improve the measures and identify areas which may cause potential problems (Payne & Williams, 2011). A pilot was conducted where the survey was tested by two police officers (not on the provided list of potential participants) and a senior university lecturer. This pilot allowed the researcher to not only estimate the time of completion, but also provided officers the chance to express their opinion on the design and questions. Having this police perspective and insight was valuable as it enabled the researcher to make any changes and include police terminology. Upon testing the survey, an optional comment box was added at the end of the survey for respondents to make further comments. This was relevant for the study as it provided officers an open platform to state their opinions and perspectives on the topic, whilst remaining anonymous. It also provided a qualitative aspect to the survey, capturing rich qualitative data to supplement the survey results. Furthermore, the terminology of "hot spots patrols" were altered to "directed patrols". This was because in the New Zealand Police, the term "directed patrols" or code "3M" are regularly used to describe hot spot patrols. It was determined that officers would understand the term 'directed patrols'. Definitions of directed patrols were provided at the beginning of the survey (Appendix A).

Once the survey was piloted, an email was sent out to approximately one thousand police officers at the beginning of August 2020. The email outlined all relevant information regarding the research. It introduced the primary researcher, the aims of the study and survey, the research question, the approximate length of time the survey should take to complete and assurances of anonymity and confidentiality. Within the email, the link to the survey was given, which would directly take the respondents to the survey. The participant information sheet was attached to the front page of the survey. For participants to access the survey, it was required that they agree to

the terms provided in the participant information sheet. The survey was open for responses for two weeks, gathering a total of 164 responses, achieving response rate of 16.4%.

3.6 Quantitative Data Analysis

The quantitative data derived from the survey was analysed through the IBM's SPSS software. Raw survey data was firstly extracted from the survey monkey platform onto an excel spreadsheet where the individual results were then coded accordingly. The variables and coded data were then entered into SPSS. Analysis of the survey data included producing descriptive statistics, including calculating central tendency through the mean score and standard deviations for a measure of variability. As Boone and Boone (2012) state, when a Likert scale is used as a method to provide a quantitative description of attitudes or personality traits, it can be analysed through describing the mean and standard deviations. Independent sample t-tests were applied using SPSS to test for significant differences based on demographic variables and attitudes towards hot spots policing. As the current study and its research question focuses primarily on the attitudes of police officers, the analysis was conducted to provide a quantitative measure of police officer attitudes.

Several questions were left open for participants to respond in their own way. This was to allow flexibility, rather than have a limited set of responses to choose from. An open question was chosen to remove any potential researcher bias or influence in the respondents' answers. This also provides more of an accurate measure of police perspectives. For example, the first open question stated, "In your opinion, how long should police spend patrolling a hot spot (in minutes)?". There were 145 responses to this question, where officers provided their answers into the open text box. All responses were extracted from the survey monkey platform and systematically sorted onto an excel spreadsheet to conduct a content analysis. Each response was counted and sorted into relevant categories by the researcher and placed into groupings based on the number of minutes the respondent stated in their response. Once each response had been categorized accordingly, a frequency count was then calculated to provide data on how many times that category appeared.

The second open question was an "other (please specify)" option for "What is your preferred method of directed patrol" in which asked the respondents to specify what their preferred method is. Furthermore, Question 10, "why do you prefer this method?" was an open comment box to allow respondents to provide their reasons why they preferred that method of directed patrolling. There were 147 comments overall. All of the comments submitted to the text boxes were analysed using a content analysis in order to identify recurring themes. The results of the content analysis can be found on page 49.

In addition, the survey asked respondents "Do you have any other comments or feedback regarding hot spot patrols?" which was an optional text box left open for respondents to make any further comments regarding hot spots. Therefore, respondents had the flexibility to provide answers of their choice. A total of 76 responses were submitted, with responses ranging from 11 to 214 words in length. A manual thematic analysis was conducted to analyse these comments, providing rich qualitative data to supplement the survey findings. Although the interviews and survey comments were analysed and reported separately, the process used remained the same. The qualitative results from the survey and interviews can be found in the following results section.

Qualitative Phase: Semi-structured Interviews

The second phase of the research included qualitative semi-structured interviews. This qualitative phase was used to supplement and add depth to the quantitative data. Creswell (2007) states that qualitative methods such as interviews can enable the researcher to understand attitudes and perspectives deriving from the participants personal experiences. Interviews are also an effective method for exploratory research involving attitudes and perceptions (Gray, 2004). Therefore, as the current research is an exploratory study on police officer attitudes, semi structured interviews was deemed critical to explore the officers' views toward hot spots policing.

3.7 Semi-structured Design

Semi structured interviews were determined to be the most effective instrument to extract the most information regarding the attitudes, experiences, and understandings of police officers. Semi structured interviews allow the researcher to follow a series of open-ended questions, designed to allow freedom and flexibility to probe and adapt the questions throughout the interview. Probing questions are used to explore the participants responses in greater depth (Gray, 2004; Bryman, 2016). An interview guide consisting of 10 questions (Appendix G) was developed as a result of knowledge gained from an extensive review of the literature and analysis of the survey data. These questions were predominantly open ended and designed to explore the attitudes, knowledge, and experiences of New Zealand police officers toward hot spots policing.

3.8 Sampling Interview Participants

Interview invitations were initially planned to be distributed to the same sample of police officers used for the online survey. However, due to a COVID-19 lockdown and access restrictions put in place during the data collection process, the researcher was subsequently unable to send out interview invitations to the entire sample (one thousand) of the officers. This was due to accessibility issues, as well as the study being put on hold by New Zealand Police because staff were actively dealing with the COVID-19 response. Therefore, once the researcher was enabled access to the police officers, convenience sampling was deemed the most efficient method to recruit police officers for the study. Once the survey had been distributed, three officers personally emailed the researcher expressing their interest in the topic and delving further into their views. Due to time constraints on the research, the scope of the interview recruitment was limited to these officers three officers. An invitation to be interviewed was sent through email to each individual. The email contents included introducing the researcher and the current study, an invitation to take part in an interview as well as information regarding the

interview process. The participant information sheet was also included within the email to provide further information on the study.

3.9 Interview Implementation

Once the email had been disseminated, all three officers contacted the researcher through email to express interest to participate in the interviews. These participants were then provided the consent form which outlined further information regarding the interview process, which required the participants to sign the form and return to the researcher. The method of the interviews was then organised and decided on with each individual, with the option of either a phone or zoom interview. Two interviews were therefore conducted over the telephone, and one was conducted via zoom.

At the beginning of the interview, the researcher followed general interview protocol. This included an introduction reminding the participants about the purpose of the current study and the interview process, including the topics that will be covered. Each participant was reminded of their rights as well as ethical considerations such as anonymity and confidentiality. Each participant was also reminded that the interview will be recorded, therefore obtained verbal approval to record the interview. The researcher then provided each participant an opportunity to ask any questions or raise any concerns they may have. The interviews lasted an average duration of thirty minutes. Throughout the interview, the researcher allowed each individual to speak freely and remained professional, respectful and neutral at all times. This an important technique to conducting semi structure interviews, to prevent any bias or influence from the researcher (Adams, 2015). If the researcher believed that more information was necessary, or further clarification was required, probing questions were asked. Upon closing the interview, the researcher thanked the participant, and they were given the opportunity to ask any questions. The participants were then reminded that the research ensured the highest level of confidentiality.

3.10 Potential Methodological Limitations

The fact that the interviews were not conducted in person, may be a limitation. Due to the COVID-19 lockdown and travel restrictions, face-to-face interviews were unable to be completed. Therefore, telephone and online interviews were completed as alternative methods. According to Wilson (2012), in-person data collection is beneficial as it allows the researcher to observe non-verbal cues, such as body language and facial cues, which can be useful information to add to the analysis of the data. Furthermore, in-person interviews may also serve to build better trust and rapport with participants, which may allow them to feel more comfortable to share their views and experiences (Knox et al., 2009). Therefore, the lack of interviews being conducted in-person may be a limitation. On the other hand, phone interviews

can be an efficient and cost-effective method to access participants who may not be accessible in-person. Furthermore, phone interviews may be attractive for some participants, as they ultimately can provide more anonymity, which may cause participants to become more forthcoming with information (Musslewhite et al.,2006). In this case, due to COVID-19 restrictions, phone and online interviews were deemed the most efficient method to gather qualitative data.

3.11 Transcription

All interviews were audio recorded to ease transcription and analysis. The primary researcher was the only person to listen to and transcribe the interviews. After each interview, the recording was listened to as a means to ensure that the full interview had been successfully audio recorded. After ensuring all interviews had been successfully recorded, the researcher transcribed the audio recording onto a Microsoft Word document. Any identifying data, including names and locations were subsequently removed from any transcription to ensure participant confidentiality. Upon saving the files, each interview was saved under the names such as "Transcript: Interview one".

3.12 Thematic Analysis

In order to analyse the interview transcripts and the qualitative survey comments, a manual thematic analysis was utilised. This is an inductive and interpretative approach in which allows the researcher to transcribe the interview and conceptualise the data into key codes, and themes (Braun and Clarke, 2006). Thematic analysis of data is a powerful and flexible process that generates rich and comprehensive interpretation of the findings, which is an effective method to yield an in-depth understanding of the officers' attitudes.

3.13 Coding Process

Thematic analysis is an analysis technique to categorise raw data into themes. The process to thematically analyse the data for the current study was guided by the six-phase framework as outlined by Braun and Clarke (2006). The initial familiarisation process consisted of listening to the interview recording several times and noting down any codes and patterns. The next step was the generation of initial codes through printing every transcript and noting down and highlighting key words or sentences which were of interest. The concepts were then noted in the margin of the transcript. Codes were noted in the form of acronyms; therefore, a codebook was also used in order to define each acronym. Once the initial codes were generated, they were reviewed and categorised accordingly. To facilitate the categorisation of codes into relevant groups, data extracts on the transcripts were manually cut out and placed into categories based on their codes.

3.14 Creating Themes

The next phase was to search for relevant themes from the codes. This was an active process, through reviewing and comparing codes, and identifying any similarities in the coded data. The coded data was further reviewed, and similar extracts were then clustered into categories according to similarities in relation to views and attitudes toward hot spots policing. These codes were then further reviewed and potential sub-themes were then constructed. A total of five themes were generated from the codes. Themes were created based on similarities and differences in views and attitudes toward hot spot policing. This included participants discussing the benefits of hot spots policing as well as some challenges or limitations of the strategy. It also included participants views on the implementation of hot spots policing, as well as certain organisational and cultural barriers. The next phase included a quality assurance review of the themes. This included refining and reworking themes as well as removing or relocating themes were unclear or overlap with others. This phase included the reviewing of the themes in relation to not only the coded data, but ensuring the themes are connected to the overall aim of the study and its research question. These themes are presented within the next chapter, the results section

3.15 Ethical Considerations

Throughout each data collection phase in the current study, the rights of participants were fully protected. This was through the study being carried out in accordance with the Auckland University of Technology (AUT) Ethics Committee and the AUT Research Policy rules and regulations. Ethical approval was issued in May 2021 (AUTEC reference 20/414). The New Zealand Police Research Panel also approved the research in July 2021, which allowed the researcher access to the New Zealand Police for data collection.

Chapter Four: Results

4.0 Quantitative Data

This chapter presents the quantitative findings of the online questionnaire distributed to police officers (n=164). The online survey was distributed to police officers throughout Bay of Plenty and Waitemata district. There were 164 total responses to the survey. The findings of the survey are presented in a way that seeks to understand the attitudes of police officers toward hot spot policing in New Zealand through average (mean) scores to the likert statements. This chapter will firstly present the demographic data of respondents. The descriptive statistics of attitudinal statements will then be presented, in order to shed light on the attitudes of police officers toward hot spot policing. The findings from both the quantitative and qualitative data will be discussed further in Chapter 6.

4.1 Demographic Data

The demographic section of the survey included questions relating to the respondents, age, current rank in the New Zealand Police, the length of time served in police, and current policing areas. This demographic data was then used in further analyses to examine relationships between attitudes toward hot spot policing and the respondents' demographic factors. The demographic information of the respondents is highlighted in Table 1. Rank data indicated that 71.3% (n=102) of the respondents were either constables or senior constables and 28.6% (n=41) were in more of a leadership position, including Sergeants (n=23), Senior Sergeants (n=13) and Inspectors (n=5). The amount of time served revealed that the majority 68.7% (n=99) of respondents had served over 10 years and 31.2% had served under 9 years in the New Zealand Police. The age data revealed that the ages of respondents ranged from 18 to 65 years, with the majority of respondents in the 45- to 54-year-old age group (n=52). However, 50% (n=71) of respondents were aged 44 and under and 50% were aged 45 and above. Most respondents policed across urban environments (51%), however 12% (n=17) of respondents policed rural environments. A further 37% worked in an environment that was a mixture of both urban and rural (Table 1).

Table 1: Demographics of police officers

		N	%	Total (N)
Ranking	Constables	102	71.3	143
	Leadership	41	28.6	
Time served	Under 9 Years	45	31.2	144
	Over 10 Years	99	68.7	
Age	Under Age 44	71	50.0	142
	Over Age 45	71	50.0	
Area	Urban	72	51.0	141
	Rural	17	12.0	
	Both	52	36.8	
District	Waitemata	42	29.3	143
	Bay of Plenty	99	69.2	
	Other	2	1.39	

4.2 Police officer attitudes: Quantitative Results

This section will present the descriptive statistics related to the attitudes of police officers towards hot spots policing. Twelve statements in the form of a five-point Likert scale were presented on the online survey, separated into two sections: attitudes towards hot spot policing and attitudes toward the method of foot patrols.

4.3 Effects on Crime

Officers held generally positive attitudes towards the effects of hot spots policing on crime. For the statement "Directed patrols (in a crime hot spot) are effective a reducing crime", the mean ranged from 3.90 to 4.17, with the average score of 4.03. There was a very small spread of deviations between .49 and .89. This indicates that the majority of respondents agreed that directed patrolling in a hot spot is an effective strategy at reducing crime. An independent samples t-test indicated that there was no significant relationships between officers attitudes and their ranking, t (141) = 1.54; p = .12, as well as years of service, t(142) = 1.37; p= .17 and age, t(140) = -.98; p= .32

Similarly, for the statement "directed foot patrols are effective at reducing crime", the mean ranged from 3.64 to 3.92 with the average score of 3.78 and standard deviation of .75. This suggests that respondents did agree that foot patrols are an effective crime control strategy. An independent samples t-test indicated that statistical significance was achieved between the age groups, t (133) = -2.08; p= .03. Participants aged 45 and over indicated greater agreement with the statement (M=3.91; SD = .67), compared to participants aged between 18 and 44 (M = 3.6; SD= .84). Other demographic variables did not have any statistically significant effect on attitudes.

4.4 Community Effects

Officers also held positive attitudes towards hot spots policing and its effect on fear of crime. For the statement "Directed patrols reduce public fear of crime" the average score across the groups was 3.73, with a standard deviation of .90. This indicates that the majority (47.3%) slightly agree with this statement. However, officers generally expressed stronger support towards foot patrols and their impact on reducing public crime. For the statement "directed foot patrols help reduce public fear of crime" the mean ranged from 3.88 to 4.10, with the average rating of 4.03. There was also a small spread of standard deviations, averaging .73. There were no statistically significant differences when comparing demographic variables to attitudes. However, the average scores indicate that most respondents did agree with the assertion that foot patrols help to reduce public fear of crime. Overall, officers believed hot spots policing to

be an effective method to help reduce public fear of crime, particularly for the strategy of foot patrols.

Officers also held very optimistic attitudes regarding the impact that foot patrols have on police and community relations. For statement 11 "directed foot patrols help improve police and community relations", the mean ranged from 4.12 to 4.40 across the groups. The average rating was 4.26 with a small standard deviation of 0.69. An independent samples t test indicated that there was a significant difference between age groups, t(140)=-2.39; p=.01, with participants over the age of 45 expressed greater agreement with the statement (M=4.40; SD=.59) compared to participants aged 18 to 44 (M=4.12; SD=-.79). There were no significant differences when comparing the variables of rank and age for this item. Overall, the findings suggest that officers strongly agree that foot patrols do help improve police and community relations.

4.5 Intelligence Gathering

Officers also believed foot patrols were a helpful tool to gather intelligence. For the statement "directed foot patrols help to facilitate intelligence gathering", the means across the groups ranged from 3.77 to 3.98, with the average response of 3.89. There was a small spread of standard deviations, with .81. Therefore, the officers do agree that foot patrols were a helpful tool to gather intelligence. An independent samples t-test indicated that there was no statistically significant relationship between demographic variables and attitudes.

4.6 Feelings of safety

Attitudes were neutral regarding feelings of safety when conducting foot patrols around a hot spot location. For the statement "I have increased concerns for my safety when I am patrolling a hot spot-on foot" (Reverse Coded) the mean ranged between 3.20 and 3.53, indicating that views were mainly neutral, skewed slightly towards disagree. There were no statistically significant differences when comparing attitudes and demographic variables.

4.7 Random patrols and rapid response policing

Interestingly, although officers expressed strong support for hot spots policing and its crime control benefits, officers were also supportive towards traditional policing strategies. This includes the standard model of policing, being rapid response policing and random patrols. For the statement "random patrols (undirected) patrols around the community are effective at reducing crime", the mean ranged from 3.65 to 3.86 with the average rating of 3.78 and a standard deviation of .74. An independent samples t-test indicated that there were no significant relationships between demographic variables and attitudes. Therefore, officers did agree with the assertion that random patrols were effective. More neutral views were expressed for the

statement "A rapid response to emergency calls of service (111) calls is effective at reducing crime". The mean ranged from 3.20 to 3.54 across groups and the average response was 3.37, with a standard deviation of 1.08. Therefore, there was a lack of strong opinions regarding the effect of rapid response policing. An independent samples t-test indicated no significant relationships between responses and demographic variables.

4.8 The threat of displacement

There was also lack of strong opinions towards the threat of displacement. For the statement "directed patrols only result in displacing crime (pushing crime to another time or location" (reverse coded), the means ranged from 2.84 to 3.14. The average rating was a neutral response of 2.84 with a small standard deviation of .7. When analysing the descriptive statistics, it indicates that this neutral score was produced as a result of mixed attitudes. Overall, 31.7 percent of respondents disagreed to the statement, 29.1 percent remained neutral, and 30.4 percent agreed. Therefore, this finding shows that officers have very mixed attitudes towards displacement of crime. An independent samples t-test indicated no significant relationships between demographic variables and attitudes.

4.9 Crime statistics guided policing

There was also a lack of strong opinions towards policing being guided by crime statistics. For the statement "police patrols should be guided through crime statistics" the mean ranged from 3.48 to 3.59 across groups. The average score was 3.59 with the standard deviation of .85 respectively. This indicates that officers mostly agree with this sentiment. An independent samples t-test established that the differences between officers who had served less than 10 years in the police (M=3.75; SD=.77), and officers serving more than 10 years (M=3.48; SD=0.88) approached statistical significance, t(97.2)=1.81; p=0.07. Therefore, officers who had served more than 10 years in the police expressed slightly more disagreement compared to relatively new officers towards policing being guided by crime statistics.

4.10 Optimal Dosages

Three questions in the survey contained a qualitative element, including a text box for participants to answer freely. Question eight stated "In your opinion, how long should police spend patrolling a hot spot?" there were 145 responses submitted the open text box. A content analysis was conducted to identify any relevant themes. Upon completing the analysis, a various themes were identified.

4.11 Short and frequent patrols

One major theme that emerged from this statement was the importance of frequency of the patrols. In particular, patrolling a certain crime hot spot frequently throughout a shift. For

instance, some respondents stated short patrols, around five to ten minutes but making them frequent:

Some respondents emphasised the importance of frequency over the length of time spent patrolling. Frequent patrols were perceived as effective due to offset temporal displacement.

"15 minutes. However, I think doing it strategically is important. Driving up and down the same road for 15 minutes is too constant, and offenders may just wait for you to leave the area. But if you drive around and pop up on their road sporadically, they may feel more at risk of being caught as they don't know where and when you'll be next..."

"It is not so much about the length of time spent in a hotspot, but more regular trips to that hot spot..."

Overall, a high proportion of responses noted times in the 10-to-20-minute category. Overall, 30 percent of responses stated timings between 10 and 15 minutes, aligning with the Koper curve strategy (Koper & Lum, 2017). The Koper curve principle highlights the optimal time of hot spot patrols being between 10 and 15 minutes. One officer stated that 10 to 15 minutes is an optimal time to be visible and prevent offending.

"For practical reasons, I believe that police should not be patrolling an area longer than 10-15 minutes, this is long enough to be noticeably visible to the public and any potential offenders, however, allows police to patrol other areas which may be hot spots as well."

Allowing patrol times to be at the discretion of officers was also common theme. Officers believed that having a rigid plan is not practical, as they prefer having flexibility when it comes to their job:

"It should be at the discretion of the officer. Just sitting in an area for 15 minutes is not as effective as going in, pulling over 2-3 cars in a visible location and then getting out..."

"There should be no allotted amount of time, it should be at the discretion of the officers. Where I police it is job to job so setting aside an amount of time is just not practical"

"Been doing this job for 25 years. Policing effectively is using up to date information to plan where and when to deploy... You need flexibility to adjust where needed, not be stuck to a rigid plan..."

Furthermore, another concept was that patrols should be ultimately dependent on the size of the area, time of day and crimes targeted:

[&]quot;5 to 10 minutes but frequently throughout a shift at peak times..."

[&]quot;5 minutes but coming back at random times along with hot timings..."

[&]quot;5 minutes is ample to 'fly the flag' but it should be done multiple times throughout a shift..."

[&]quot;Any amount of time and constantly through a shift..."

[&]quot;Randomised. 10 minutes one time. 30 another..."

[&]quot;10 minutes but it needs to be more often throughout the day..."

These findings suggest that most respondents believe that patrols should be kept short, anywhere from five to twenty minutes. However, they also emphasised the importance of frequent patrolling, which was deemed to be more important than the length of time. Other officers stated that timings should be at the discretion of police, as well as dependent on a range of factors.

4.12 Preferred Methods

Question nine asked respondents "What is your preferred method of directed patrol?". The majority of respondents (58 percent) selected vehicle patrols as their preferred method. In addition, 21 percent of respondents selected foot patrol and 21 percent selecting other. Question ten followed up from the previous question, asking respondents, asking "why do you prefer this method?". There were 147 comments submitted to the open text box. A content analysis identified relevant themes relating to the reasons why officers prefer a certain method of patrolling.

4.13 A preference for vehicle patrols

The quantitative data revealed that most respondents (58 percent) choose vehicle patrols as their preferred method of directed patrol. The main themes that were identified following a thematic analysis was that the respondents preferred vehicle patrols because they allow: a rapid response to jobs, covering more ground, access to equipment and visibility. Respondents preferred patrolling in a vehicle as it allows a rapid response to jobs, with respondents disliking being far away from the patrol car. Officers believed that patrolling in a vehicle enables the flexibility and a quick reaction time. However, this is not to say that respondents dislike foot patrols, however due to operational demands, patrolling in a vehicle is most effective.

[&]quot;Depends on the time of day and what type of crime it is to prevent..."

[&]quot;Depends on why they are identified as a hot spot..."

[&]quot;Depends on the size of the area and whether it's rural or urban. 10-15 minutes several times a day..."

[&]quot;20 minutes, depending on size/population density and transience..."

[&]quot;It varies depending on what the hot spot is caused by.."

[&]quot;Easier to access vehicle if a job gets called through. I don't mind walking though just don't like being away from the patrol car..."

[&]quot;Can take action more easily. It is easier to pursue if you're in a vehicle..."

[&]quot;Foot patrol is ideal, but the nature of our job is there are always other urgent jobs elsewhere popping up..."

The high visibility of a vehicle and the ability to cover more area were also common themes. Officers preferred vehicle patrols because it was more practical in terms of the ability to cover more area and produce more visibility compared to any other method.

"Cover more ground in the area and police car (marked) is very visible..."

"Cover further distance as patrolling rural or forestry areas..."

"Greater coverage of area and increased visibility..."

The visibility of the police car mostly comes down to the visual features on the car as well as the sounds of the siren, which respondents believe is much easier to spot in the community when compared to foot patrols:

"Cover more ground, high visibility. if you drive past the same place multiple times people often think there is more than one Police car in the area..."

"A vehicle emblazoned with 'Police' and red/blue flashing patrol lights and a siren is easier to spot and notice than a person in uniform. Also, more area can be covered in the same period of time..."

"Marked vehicle is more visible to more people. Able to respond quicker should a situation present itself. Cover more ground in less time..."

Vehicle patrols were also preferred as officers had readily available access to tactical options and more equipment. Patrolling in a vehicle was perceived as safer due to firearm access, particularly at night-time. Furthermore, practical measures such as an effective radio was mentioned.

"With all our gear, its more efficient to move via vehicle..."

"It's safer to patrol by vehicle, access to firearms and other resources is close at hand with a vehicle"

"Better strength radio and readily available firearms..."

"It is highly likely we were conducting these types of directed patrols at night-time (safety)".

4.14 Foot patrols

Relatively less respondents (21 percent) preferred foot patrolling compared to vehicle patrols. However, the officers that preferred foot patrolling was because of its potential to generate intelligence and improve police and community relations.

One common theme that emerged regarding foot patrols being the preferred method is the potential for gathering intelligence. Some officers believed that foot patrols enable better visibility and the ability to connect with the immediate environment.

One major theme was that patrols were perceived as useful for building and maintaining relationships with the community. This was through actively engaging with the community and being face-to face with the public. Furthermore, foot patrols were perceived to have a direct relationship with levels of trust and confidence in police.

"You get to meet people who you then start building a relationship with. They inevitably then tell you more"

"foot patrols can be very effective and give our community trust and confidence, our communities like communicating with us..."

"The general public can see you out and about and they comment on how good it is..."

"People talk to the police. When I have done foot patrol it can take a long time as people talk all the time and love to see a cop walking around..."

"...you can interact with people in the area and discuss crime prevention, helping them to self-protect..."

"A directed patrol only induces fear/concern/apprehension/ suspicion unless you engage with the people in the hot spot. I.e., talk to people and people see you talking to people. Diffuses any concern and those people talk to other people about your purpose. It snowballs, the positivity continues even after you leave (if you do it well with a smiley face) Simple eh."

4.15 Other methods

Furthermore, 21 percent of respondents selected other as their preferred method for patrols. A content analysis identified several repeating themes throughout the data: The most frequent response was that the method of patrolling depends largely on factors and the circumstances, such as the area being patrolled, and the crime targeted. A smaller number of respondents stated that using a combination of both methods (foot and vehicle) is effective. A few participants noted they prefer a variety of methods including foot, vehicle and bicycle patrols.

[&]quot;Silent, they can't here you coming..."

[&]quot;You are able to take more in. Driving through is a brief look what is going on, where (as) a foot patrol allows you to take more in and get a better look at what is going on in the area..."

[&]quot;You get to engage with the public. Gives you a chance for situational awareness. Hear what's going on. Pick up the vibe of what's happening..."

[&]quot;People talk with you and talk about crime trends in the local area..."

[&]quot;You can see and hear more than a vehicle. It is so much easier to detect any suspicious behaviour" (respondent nine).

4.16 Qualitative data: Survey Comment Box

This section presents that qualitative data gathered from the comment box at the end of the survey. This comment box was left open for any further comments or feedback regarding hot spot policing. A total of 76 comments were made and were subsequently analysed using a thematic analysis. Four themes were identified: the effects of hot spots policing, implementation issues, organisational factors and a resistance to research.

4.17 Theme One: Effects of Hot Spots Policing

One theme that was identified was that officers commonly noted the effects of hot spots policing. Several sub-themes included: positive effects, negative effects as well as the displacement theory of crime.

Positive Effects

Several officers believed that hot spots policing was an effective crime reduction strategy, noting comments that were mainly positive towards the strategy. One respondent held a perspective that was closely aligned with the crime opportunity theory of routine activities (Cohen & Felson, 1979). The impact of heightened police presence at hot spots was viewed to alter the guardianship of the hot spot and deter the offender from committing crime.

"Policing hot spots provides guardianship of the area and reduces opportunity to offend. Increased police profile also disrupts offender behaviour..."

The efficient use of police resources was also noted as a benefit of hot spots policing. Using crime statistics to accurately identify hot spot locations was viewed to be a logical strategy for deployment.

"[The] Use of crime stats to assist police understand where resources are best deployed to prevent and disrupt criminal activity seems like a smart thing to do. Resources are not unlimited, so this kind of deployment seems logical and intelligent to me..."

The perspective aligns closely to the current evidence on hot spots policing, as studies have found it to be an effective strategy to utilise scarce police resources. This is mainly due to the effectiveness of crime mapping technology and the deployment of resources to small locations (Weisburd and Telep, 2014). Furthermore, some respondents provided examples of their own personal experiences conducting hot spots policing. They noted that hot spots policing has been a successful tool for reducing crime. The officers believed that a visible police presence provides several benefits, such as educating staff about hot spot locations and generating deterrence.

"I have been a community constable for 11 years and youth aid for 3 years. Hot spots are an important tool in relation to informing staff the significant areas at risk and through my experience presence in uniform or marked police cars do give a sense of reassurance and deterrence especially around youth offenders..."

"Hot spot and Directed patrolling have been around for years under different names, they are a successful tool when used correctly with the correct Intel, and tools. I have used staff on foot and cars, even bikes in the past with good results..."

Therefore, officers reflected on their personal experiences to emphasise not only the popularity of hot spots policing, but the effectiveness of the strategy. These perspectives reveal that the officers' experiences with hot spots patrols, specifically using the strategy of heightened police visibility have largely been positive. Similarly, one respondent noted their experience with hot spot policing, specifically using the strategy of proactive arrests (Braga et al., 2019). They held a perspective that aligned closely with the literature on offending and violent crime, which states that a large proportion of crime (mainly violent in nature) is usually committed by a small percentage of the population (Falk et al., 2014). The respondent stated that focusing police attention on a hot spot can result in a decline in offending:

"Usually, hot spots become hot spots by just one or 2 offenders/groups constantly targeting this area. Past experiences have shown that once an arrest has been made or attention shown by police to these areas, it backs right off."

Overall, it is apparent that there are some positive attitudes expressed towards hot spots policing. Some officers held perspectives that mainly reflected their personal experiences with the strategy, frequently noting the positive impact that it has on crime and the community. Moreover, some officers' views reflected common criminological theories and crime opportunity reduction perspectives, such as deterrence theory and routine activities theory (Braga, 2016; Cohen & Felson, 1979).

Negative Effects

Although there were comments acknowledging the positive effects of hot spots policing, several respondents also noted some of the more negative effects. Firstly, officers made comments regarding potential consequences on the community. One respondent described the effects of visible police patrols to "lully the community into a false feeling of safety". This perspective aligns closely to Rosenbaum's (2006) critique, stating that hot spots policing has only a short-term effect on crime, ultimately giving a false impression that hot spot patrols have solved the crime problem for the long-term. Furthermore, some officers noted potential unintended consequences of hot spot policing on the community. This included the view that some members in the community may view hot spot patrols negatively:

"Hot spot patrols allow the public to feel safe because they see a police presence, however it is possible that other members of the public look at this as a 'waste of taxpayer money'...Police appear to be aimlessly ambling around the streets and not out "fighting crime."

Therefore, this police officer believes some members of the public may expect police to always be out fighting crime. This expectation will therefore cause some people to view hot spots policing negatively, as it may appear that police officers are not busy.

Potential adverse effects of hot spots policing were also highlighted, including the negative effects on police and community relations. Some officers believed that hot spots policing can disproportionately target low-income neighbourhoods, therefore can result in negative engagement with the area. Furthermore, police often face a catch-22 situation with hot spots policing. This is because it often places them into minority neighbourhoods but at the same time, they face the current issue of police bias and disproportionate minority contact (Ministry of Justice, 2009).

"Targeted patrols in low socio-economic areas end up enforcing a lot of people who aren't the targeted group and end up being enforced with infringements which is very negative toward engagement with the area."

"Hot spots often place us back in certain 'vulnerable' communities where we are also being told to be mindful that we don't 'over police' or unnecessarily or unfairly target certain people within the community."

Some police officers acknowledge the potential effects on the community, specifically minority populations. This disproportionate impact has also been noted in the current literature. Rosenbaum (2006) states that a high volume of crime is often reflected in low socio-economic, minority communities. Therefore, these areas tend to receive a disproportionate level of police presence. This can have further negative effects, such as increased police abuse in these areas and a damaging of police and community relations (Rosenbaum, 2006). Furthermore, research has revealed that minority populations tend to hold more negative attitudes towards the police compared to non-minority communities (Rosenbaum et al., 2005). This indicates that police officers believe hot spots policing can also have negative effects on the community. This includes the possible impact on public perception of oppressive policing, as well as the potential risk of appearing to profile minority populations.

The threat of displacement

Several officers held perspectives that strongly aligned to the displacement theory of crime. Some respondents noted that police patrols within hot spots may displace crime in the long term:

"I'd say that in the short-term patrolling in a hot spot may deter/reduce crime, however in the long term it would displace it. i.e., youth offenders wanting to steal cars notice an influx of Police so decide not to right then and there but change their tactic to a different area."

"Patrols are good at stopping minor offences occurring but only serve to disrupt and displace offenders who are looking to commit more serious offences."

The motivation of the offender was regarded a key factor in determining if they will displace crime. One respondent noted that if an offender makes the decision to offend, they will do so. Temporal displacement was noted as a threat to hot spots policing. This includes postponing offending:

"I do not believe offenders will not offend if they spot Police nearby. If an individual wants to offend, they will. They'll simply wait until police are gone and then continue. I do not believe an offender spotting Police at a hot spot will prevent them from committing a crime full stop, merely postpone their offending."

This perspective closely relates to the rational choice perspective on displacement. This assumes that offenders are often rational in their decisions to commit crime and make decisions to offend based on a cost-benefit analysis. Therefore, if they perceive the benefit to be greater than the risk associated with police presence, they will be motivated to displace their offending (Cornish & Clarke, 1987).

Sceptical attitudes were also expressed regarding testing and tracking the prevention value of hot spots policing. The complex nature of displacement was noted, with one respondent acknowledging the difficulty of measuring the phenomenon.

"There is no real way of measuring the preventative value of being in a hot spot location prior to a crime occurring (did it not happen because we were there, did it happen later once we left the area)"

This is a common limitation noted within the hot spots policing literature, as many studies have not adequately or effectively measured displacement in hot spots experiments (Rosenbaum, 2006)

The strategy of combining overt and covert patrolling was viewed by one respondent to mitigate the issue of displacement. This is due to the assumption that offending is temporally displaced as a result of overt patrolling:

"Doing a combination of overt and covert as offenders see patrols and can hang around and wait for them to leave."

Therefore, some officer's perspectives towards hot spots policing strongly aligned with the displacement theory of crime. They felt sceptical regarding the preventative value of hot spots policing, as they believed that it results in spatial and temporal displacement.

In summary, the first theme that was identified was the effects of hot spot policing. There were a range of comments in which touched on the effects, including the benefits and limitations of the strategy. Some officers noted the benefits that hot spot policing could provide, especially its

effect on crime. On the other hand, a range of views that were expressed were particularly negative in nature. Officers believed that hot spot policing had several drawbacks. Potential limitations that were noted include: the unintended consequences on the community, as well as the spatial and temporal displacement of crime.

4.18 Theme Two: Implementation Issues

Officers expressed negative views regarding the current implementation of hot spot patrols, frequently commenting on their own personal experiences with hot spot policing. One implementation issue was that hot spots policing was based on incorrect crime groups. Officers stated that their current experiences with hot spots policing was targeted to petrol station and supermarket thefts. However, they expressed disagreement with this, believing that it is a waste of resources targeting crimes that are not priority areas.

"The hot spot policing we have undertaken so far targeted the wrong crime group. It was largely targeted at petrol drive offs and shoplifting from supermarkets. These crimes weren't identified as priorities by our Area Leadership teams and aren't crimes that hugely affect public trust and confidence."

"Directed patrolling around a hot spot such as a petrol station is a waste of police time. These are false statistics and could easily be preventable by the petrol station taking precautions such as setting the pumps to prepay rather than relying on Police to provide a government funded security service to private business."

Therefore, police officers are frustrated that they are currently being deployed to hot spots to target dishonesty offences such as thefts at private businesses. They believe that these crimes are not current police priorities and effectively is a waste of police resources as the private businesses (such as petrol stations) could invest in sustainable target hardening measures to prevent these crimes.

Similarly, the issue of hot spots policing deployed at the wrong time of day was expressed. For one respondent, they believed that the 15-minute hot spot patrols ultimately were futile due to the patrols being conducted at the wrong time of day. They also expressed a level of frustration with the fact that researchers provided them instructions:

"We recently had to do hot spot patrols in high crime areas for 15 mins a few times a day. The only issue was that the high crime happened at night-time due to this being a pub and restaurant area and the patrols were directed for the daytime. These instructions came from 'hot spot' researchers, which made the whole exercise pointless. If we are going to do hot spot patrols, then it has to be well informed within the local area and for a specific purpose."

Therefore, some officers hold negative attitudes towards the current practise of hot spots policing, especially when they disagree with the crimes that are targeted or the time of day they are directed to patrol. The instructions seem to lack credibility for officers, as they disagree with the hot spots that have been identified by research teams. Therefore, there seems to be a some

disconnect between police officer perspectives on hot spots in the community and the current research practises.

A lack of organisational communication was noted by one respondent. At times, police officers do not know why they are being directed to a certain hot spot. Furthermore, they state that there is an issue of incorrect locations being recorded by default on the police system, thus creating inaccurate hot spot data, ultimately affecting the deployment:

"Sometimes you don't know what you are preventing by being there and never will. I have been directed to a hot spot knowing that it is wrong because of a consistent incorrect location being recorded by default."

In summary, negative views were expressed regarding the current implementation of hot spots policing. It is evident that there is a perceived level of disconnect between researchers and police officers on the ground. This is because some officers do not agree with their hot spot assignments or believe that the hot spot data is inaccurate. This ultimately provides valuable insight into the current operational deployment of hot spots policing in New Zealand. Officer perspectives were based on their personal experiences with hot spots policing, noting common implementation issues and errors that they have encountered.

4.19 Theme three: Organisational Factors

Officers noted several organisational factors which they believe to be barriers to the success of hot spots policing. The theme of organisational factors comprises several sub-themes, including: a lack of resources, ineffective performance measures and a lack of organisational communication.

Lack of Resources

One strong theme that emerged from the survey comments was the issue of increasing demands and high workloads for police officers. Officers stressed that they do not have the time or resources to conduct hot spot patrols efficiently. Respondents expressed strong views regarding the lack of resources to conduct hot spot patrols.

"On frontline, there is barely any spare time to conduct hot spot patrols. There is barely time to have lunch!"

"I think that hot spot patrolling is great, however we often lack the time or resources to do them regularly or thoroughly"

"I believe hot spot patrolling is effective however staffing issues cause problems when prioritising these tasks"

"Biggest problem police have is the lack of staff and taking from response all the time is demoralising for the staff who start to not care"

Therefore, limited police resources are a major issue that currently affects hot spots policing. Officers state that they frequently lack the time to complete the patrols effectively, which emphasises the fact that they have increased demand from other priority areas. Furthermore, officers perceive that hot spots policing cannot be completed effectively due to a lack of staff. Having a lack of staff was believed to generate problems such as low job satisfaction and issues with prioritising jobs. The nature of frontline policing a predominately reactive role, with constant demand and pressure to efficiently respond to emergency incidents. This reactive role combined with a lack of staff makes it difficult to conduct hot spots policing:

"They [hot spots patrols] work great, although with short staff having to respond to emergency/reactive incidents, it is easy for hot spot patrols to be pushed down the list of priorities. The science behind it makes great sense though and comes down to "bums in seats/feet on the ground."

Furthermore, the increasing demand on frontline police was seen as a key barrier to implementing hot spot patrols. Respondents noted that hot spots policing is increasingly difficult for frontline police to conduct, as they are constantly responding to jobs as well as tasked with other priorities such as paperwork and bail checks:

"The difficult thing about hot spot patrols in my opinion is the staffing, frontline officers do try to conduct hot spot patrols, but these are the same officers that need to respond to 111 calls and conduct bail checks and paperwork. Officers end up getting called away from hot spot patrols pretty quickly."

"Hot spot patrols are a good idea; however frontline staff are under the pump going from one [priority one] job to the next [priority one] job, let alone trying to complete the paperwork as well. Hot spot patrols are nice to have BUT it does not reduce family harm and mental health events that are the majority of our time."

Furthermore, some respondents expressed their frustration with the realities of frontline policing. The findings reveal that police would like to complete more hot spots patrols, however their role is heavily dominated by family harm and mental health jobs. Some officers seemed to be dissatisfied with this, with one respondent using the term "mental health workers" to describe police work. The demand and workload that arises from these incidents was clearly a source of irritation for police officers:

"There needs to be more of this [hot spot patrols] as a prevention measure however police are spending more time being counsellors for people's relationship problems and wasting precious time doing pointless reports for these incidents. The general public are crying out for more visibility but cannot get it due to understaffing and focus being put into other areas i.e., mental health..."

"I am now a detective and understand that the frontline police no longer have the capability, opportunity or resources to conduct hot spot patrolling. Their role is now reactive and unfortunately calls from service are dominated by family harm, mental health and suicide incidents. It is my opinion that less than 10% of calls for service are for actual criminal offences. The frontline police are now mental health workers/family counsellors."

These perspectives reflect the current literature on police culture, specifically the action-orientated characteristic of policing (Reiner, 1992; Murray, 2002). Reiner (1992) found that there are several key characteristics of operational police culture. These include: a strong sense of mission towards police work and a heavy emphasis on action-orientated policing. This action-orientated culture emphasises police work to be mainly fighting crime and arresting criminals (Murray, 2002). However, the current study found that some police officers hold negative attitudes towards the reality of their role, which is primarily responding to mental health and family violence events. This type of police work ultimately contrasts with the action-orientated characteristic that is engrained within police culture (Reiner, 1992). Therefore, police culture may have an impact on police perceptions of their role and the reality of police work. Future studies should endeavour to explore this link further.

Similarly, one respondent noted increasing demand in other areas, such as natural disasters and the COVID-19 pandemic. This work has ultimately caused police to be stretched for resources and staff, ultimately causing hot spot patrols to be put on the backburner:

"While I endorse the idea of directed patrols, I hear that 48% or thereabouts of PST work is dedicated to domestic violence and mental health. Police are stretched for staff: the white island eruption, MIQ, serious dog attacks, no doubt door knocking people to check if they are abiding by their self-isolation management... manning checkpoints during this latest bout of COVID-19... attending and mopping up what should be Oranga Tamariki and Mental Health work. This is all on top of the work that police are meant to do, which is being put on a back burner to meet the needs as stated above."

Officers strongly believed that hot spots policing should be resourced differently. The pressure on the frontline, being the Public Safety Team (PST) to conduct hot spots policing was viewed negatively by officers. Several officers argued that hot spot patrols should be directed to other police groups that are not working on the frontline, such as prevention and investigation teams:

"It should not be the job of PST staff; they are too busy doing their own job. It needs to be given to staff who have the time and are available on a regular basis [..] it needs to be the right persons not PST staff."

"This needs to be resourced properly with teams that do this as their BAU, it is ineffective to have teams trying to complete these patrols properly when they have other demands, therefore the data gathered by these patrols being completed will be inaccurate and not show whether they actually work."

"Hot spot patrols are a perfect idea, however not always suitable for PST...Possibly more suitable for Prevention and Investigation staff."

Therefore, it is obvious that a lack of resources is a current organisational issue in the New Zealand Police. This is ultimately causing issues in term of conducting hot spots policing, especially for frontline staff who already have a high workload in terms of reactive policing and other administrative duties that they need to complete. The lack of time, staff and other resources are major problems. This finding provides insight into the current practise of hot spots policing, ultimately revealing that it is likely not currently being prioritised or completed effectively, especially by PST staff in New Zealand. Therefore, hot spots policing may be better implemented using other police teams that are not working on the frontline.

Ineffective Performance Measures

Another sub-theme was that officers expressed discontent with current organisational processes. This includes the performance measure of hot spot policing being a simple directive. Particularly negative views were expressed regarding the fact that hot spot patrols are often a simple tasking or a 'tick box' directive. This tick box process was commonly referred to and repeatedly mentioned throughout the comments. Respondents held the common belief that this tick-box directive ultimately results in staff losing their proactive sense which subsequently has an impact on the quality of the patrols. The organisation places too much emphasis on taskings (completing patrols), rather than using other measures of success, such as crime prevention or

measuring public trust and confidence. This performance measurement of completed taskings ultimately causes hot spots policing to lose its value for crime and the community:

"When management measure outputs by simply confirming that directed patrols are (or are not) completed- then they have lost the whole value in using directed patrolling as a resource to reduce crime and gain public trust and confidence."

Respondents stated that this measure also has implementation issues. This is because often police officers tick the tasking without conducting the patrols. Furthermore, officers tend to prioritise other tasks such as eating lunch or check social media instead of the hot spot patrols, which ultimately reveals hot spots policing is not prioritised by most officers:

"Most cops tick the "hot spot" tasking as an opportunity to do something else (eat lunch, do paperwork on their phones, check social media-its natural)."

The need for officers to be proactive when they are hot spot patrolling was also emphasised. However, some respondents believed that measuring performance based on a tick box has implications on the quality of patrols. For instance, one respondent stated the need for an active presence in a hot spot, which is neglected due to the current problem of officers being overly task orientated. They highlighted the difference between officers conducting patrols to achieve a particular goal, compared to officers patrolling just to tick the directive:

"Police tend to be task orientated and not goal orientated. You can be present or be a presence in an area. You need to be an active presence to be effective patrolling hot spots and not just a tick in the box."

Furthermore, this task-orientated nature of police is caused by the organisation placing too much emphasis on completing tasks. It was suggested that if the tasking was not just a tick box for completion, but rather to be proactive in the community, it would change the quality of patrolling. Some officers believed that the performance measurement for hot spots policing is causing low quality patrolling. One officer stated that the measure should instead be based on the level of engagement and proactive policing within the area:

"Staff are quick to catch on that they are patted on the back for completing directed patrolling. They will go to the area, but the quality of that patrolling may be very low. [..] Quality over quantity gets lost at times."

"The mind of a constable during a directed patrol, can be and I often see it is that they will tick the directive and turn off their proactive sense. They will not stop that vehicle or speak to that person because they need to do the directed patrol. Whereas if they were told to go out into the community and actively be proactive, they would because their mind is prepared for that work."

Therefore, it is evident that the current performance measures, being a tick box directive is perceived as ineffective for both officer motivation and the quality of hot spots policing. When

the organisation places too much emphasis on having officers' complete hot spots patrols, they can quickly become task orientated. Police officers are currently completing hot spot patrols, for the sake of simply ticking their tasking. However, this is a problem as the quality of hot spots policing is subsequently jeopardised due to a loss of proactive policing.

Lack of Organisational Communication

Another organisational sub-theme that was highlighted by officers was the lack of organisational communication regarding hot spots policing. Respondents believed that the reasoning behind hot spot policing is not communicated effectively, including the advantages and goals of the strategy. Officers believed a lack of communication has a direct correlation to a lack of cooperation with the strategy:

"Often, we are set tasks and we complete them for the sake of a stat or a record, without understanding the purpose and making quality use of our time. This comes back to the why and staff buying into what we are trying to achieve."

The current study found that police officers strongly value being informed of new organisational strategies (such as hot spots policing). Respondents believed that officers require the full justification of the strategy and its advantages, in order for it to be implemented with fidelity:

"If we're telling staff what to do as opposed to explaining the 'why', then again it can be an issue of reduced uptake."

"Staff need to understand the advantages otherwise the patrol loses its effectiveness for staff and public."

Relevant information, including the impact of crime on the community, should be communicated to police officers on the ground taking part in these strategies. Through the provision of information, this can help to improve informed prevention efforts and the quality of hot spot policing. One respondent believed that officers should be actively involved within the decision-making processes relating to hot spots patrolling, rather than simply instructed by management. This would help improve the overall value of hot spots policing:

"Giving staff information about how crime is impacting the community will help them make informed prevention efforts. I question whether it needs to be titled "informed patrolling", so it's more of a value led decision that can be made by staff as opposed to be a command-and-control directive."

Furthermore, respondents strongly felt that police officers on the ground should be involved in the decision-making processes of hot spots policing. This includes allowing officers to help decide the relevant hot spot locations. Involving officers in the process was viewed to have a direct impact on police officer cooperation:

"I feel the person patrolling needs to feel they have had an input into why the area is considered a hot spot. Not just chosen remotely by management. They need to know and buy into why they are patrolling that are for that crime."

The advantages of organisational communication were highlighted by one officer's personal experience. They stated that if information and the rationale was communicated efficiently, it can have a direct impact on police officer motivation. This includes feeling more engaged during their patrols, which can produce more effective outcomes for the strategy:

"If the reasoning behind the patrol is sound and delivered to the patrolling police effectively, then it is more effective, and I felt more engaged whilst patrolling."

Therefore, the lack of organisational communication was noted as a major issue relating to hot spots policing. It is clear that police officers highly value effective communication regarding strategies that involve them, including hot spots. This includes providing officers relevant information, including the rationale and goals behind an initiative. Furthermore, officers value being included within key decision-making processes when it comes to hot spots policing, which can help to improve uptake and officer cooperation to the strategy.

Overall, several organisational factors were key themes relating to officers' perspectives on hot spots policing. Respondents noted current organisational issues, including: a lack of resources, ineffective performance measures and a lack of organisational communication. These factors were seen to have a direct impact on the implementation of hot spots policing and officer cooperation toward the strategy.

4.20 Theme Four: A Resistance to Research

The fourth theme that emerged was the resistance that officers expressed towards research and statistics guiding policing. The findings reveal that officers often felt frustrated with the statistical aspect of hot spots policing. Some officers felt very strongly that they knew their area better than statistics:

"Us in smaller areas, often know our areas and people better than any statistical data"

I love hunting criminals and have previously felt affronted to be "tasked", because I felt I knew my area better, especially if the reason wasn't communicated."

"Generally, patrols should be guided by crime statistics (i.e., burglaries, stolen vehicles etc), however it should not be exclusively this, and police intelligence should be used to guide patrols."

Therefore, some respondents expressed particularly negative attitudes towards hot spots policing being guided by statistics, mainly because they believe that they know their area best.

Therefore, they believe that police local knowledge and intelligence should also be used to guide hot spots policing. Furthermore, organisational processes such as the lack of communication was viewed to intensify feelings of resistance.

Officers also expressed some resistance towards hot spots policing and its reliance on crime statistics. Hot spots policing is a place-based strategy, that focuses primarily on identifying areas that have high concentrations of crime. However, some officers stated that police prefer offender-focused policing, policing the areas where there are known offenders. They believed that hot spots policing often takes away their professional discretion:

"Often the hot spot is where the crime occurs, and often officers prefer to work where the potential problems of people who create the hot spot come from"

"It goes against the proactive mindset we have. Start of shift we know what the issues are, what's happening, who our hot offenders are."

The limitations of using crime statistics to deploy hot spot patrols was noted. Most of the hot spot policing initiatives are deployed based on the total number of calls for service. However, one respondent noted that these statistics are simply limited to the people in the community who simply wanted help from the police. They acknowledged the dark figure of crime, being the large proportion of crime that goes unreported (Doorwaard, 2014). Therefore, deploying hot spots patrols based on calls for service data was viewed as an ineffective way to police:

"Hot spots relate to calls of service; it is not a good idea on where to put resources. The people there are calling because they think police can/should respond to their needs/can complete an intervention. If you don't believe this, you don't call if you don't believe police can improve your circumstances. But crime still occurs, and criminals are still present."

Another area of resistance was that officers expressed a lack of trust in researchers working within the police environment. One respondent expressed particularly negative views regarding a hot spots experiment implemented by researchers. Thus, the disconnect between researchers and police officers was highlighted:

"Too often directed patrols are issued by people in an office with no actual information or feel on what's happening in the community. Lots of different factors come into play. This type of policing also dumbed down the approach that police officers could take as they were being told to be at a point for 15 minutes. This a security guard can do."

"These instructions came from 'hot spot' researchers, which made the whole exercise pointless. If we are going to do hot spot patrols, then it has to be well informed within the local area and for a specific purpose."

A strong sense of dissatisfaction was conveyed towards researchers working in the policing environment. Terms such as "people in an office" and "hot spot researchers" were used by

officers to describe the evidence-based policing team. This ultimately shows that there is a substantial disconnect between researchers and police officers on the ground, with police officers resisting the integration of evidence into the police environment. The term "dumbed down policing" was used to describe the 15-minute hot spot patrols. Therefore, this indicates that this respondent felt strongly that it removes their discretion. Similarly, one respondent was unwilling to accept any guidance or input from external researchers, believing that police should uphold their discretion and initiative:

"It's about using your own initiative, not being a robot being told where to go. Cops like to use their brains, very important or they will quickly lose interest in what they are doing."

Therefore, this highlights that police officers value their own discretion and autonomy in policing, with some officers feeling strongly that hot spots policing removes their proactive mindset and discretion. Some officers were apprehensive regarding the use of crime statistics to guide hot spots policing, indicating the need for local police knowledge to be integrated into decision making processes. Furthermore, a high level of resistance was also expressed by some officers towards researchers in the policing environment. Therefore, these findings show that some officers are resistant towards research and evidence-based policing.

4.20 Qualitative Data: Interviews

The following section presents the qualitative data from the semi-structured interviews. Due to COVID-19 interference with the data collection process, the interviews were limited to three participants. Interviews were conducted with sworn staff in the New Zealand Police in order to help clarify some of the survey responses. A thematic analysis was conducted to identify relevant themes. The four main themes identified includes: effects of hot spot policing, current implementation issues, police culture and improving police commitment to hot spots policing. This section will present the results of the interviews, discussing the major themes and relevant sub-themes.

4.21 Theme one: Effects of Hot Spots Policing

One strong theme that emerged from the interviews was the positive impact hot spot patrols had on police and community relations. All of the interview participants noted the positive effects that hot spot policing, particularly foot patrols can have on the community. One officer believed that hot spot foot patrols helped to build public trust and confidence in police through actively engaging with the community:

"Yeah, I believe it has a positive impact on the community. Especially for shop owners, vulnerable people of the community, people who are victims of crime. Seeing a police officer is reassuring that they aren't going to be victims. And you know, we can take that chance to speak with any member of the public and to build that trust and confidence." (participant one).

Officers highlighted the positive impact on business owners, stating that officers often get positive feedback from them. The officers stated that these positive reactions from business owners have an impact on staff motivation to conduct hot spot patrols:

"I think it has a really positive impact on the community (...). It was not too long ago we were just walking down the mall and a business owner; he came out and was just so happy with the police presence in the area. He just absolutely loved it that we were getting out (..) So, it's just real positive. Personally, for me it makes me want to get out and do a lot more of this stuff" (participant three)

"The feedback was "oh it's so good to see you guys" ... it's the in-person thing. Walking in, chatting to them. And the guys, the staff enjoyed it. The officers came back and said, "oh that was really cool actually" because the [business owners] were really pleased to see us" (Participant two)

Furthermore, hot spot foot patrols were regarded an effective strategy for improving public perceptions of the police. One participant highlighted the community policing aspect of foot patrols. Through actively engaging and taking photos with the public, this was viewed to have a positive impact on public perception of police:

"You know, certain times over summer, we may be walking down the beach. We get a lot of great feedback, seeing us out and about walking around, you know getting photos with children and everything like that. And it shows the public, and younger people in the community that you know, police aren't scary people that go around locking up. We can go and get an ice-cream. You know we are all human. We are just trying to do a good job because that's what we signed up for" (Participant one).

Hot spot foot patrols were also viewed to be effective at building relationships with the community, which can lead to more effective intelligence gathering. One respondent stated that foot patrols allow face-to face interactions with the public, which can enable people to feel comfortable sharing local knowledge and issues in the area, which may have not been reported: "Engaging with them and what their issues are. Because a lot of the time they may be scared, or they don't want to bother police with their issues. So, when you are going to speak with them it gives them a good opportunity to be face to face with police... you might get a wealth of information that otherwise might have not been reported because they don't want to bother police" (Interview one)

Therefore, the officers believed that hot spots policing can have a positive impact on the relationship between police and the community. The specific method of foot patrols was seen to help build relationships, facilitate intelligence gathering and improve public perceptions of the police.

Although attitudes were largely positive regarding the impact on police and community relations, participants noted some downfalls of hot spots policing. In particular, the officers indicated that the spatial and temporal displacement of crime may be a potential adverse effect of the strategy. Temporal displacement was viewed to be the biggest threat, due to the belief that offenders simply learn the police routine (especially in the case of 15-minute patrols) and will wait for police to leave the area:

"I think it does, like when police are in those areas it may push offending into other areas (..). So, you're pretty much taking offending from that one area and putting it into other areas. And you know, even some offenders, they get to know the police routine, and when the police leave, they just come back" (Interview three)

"I think well once again, experienced officers are going to go, you know... well, we can sit there for 15 minutes and leave and two minutes later, that's when the offending occurs" (Interview two).

However, one participant noted that some offenders can be very motivated and will go to the extent of learning the police routine. Therefore, they stressed the importance of making hot spot patrols irregular and frequent, to prevent offenders from learning the patterns of the police routines:

"Offenders are very good at picking up patterns. Um and you know, a motivated offender will take the time to look at patterns and to take the opportunity to commit their crime. That's why it's important to make it irregular patrols" (Interview one).

This perspective aligns closely to Sherman's (1990) crackdown theory and the Koper curve theory (Koper, 1995) on hot spots patrols. These theories state that patrols should be frequent and irregular to prevent displacement. Participants emphasised that displacement is due to the motivation levels of an offender. The participants believed that some offenders can be highly motivated, therefore will displace their offending. One officer provided an example of motivated offenders in their district. They state that there is an issue of offenders scanning the police radios in rural areas, which ultimately results in the displacement of crime:

"You know there are sort of proactive offenders. And one of the issues we have always had you know, outside of the metros now is the analog radio...they have scanners, and they know where we are and where our presence is...so some of the feedback we got from those young [offenders], they knew that there weren't many units on night shift, so that's one of the reasons they targeted our town... it's not hard for them to know where the units are, like they are tied up. They work out their call signs if they have been around long enough and they work out... okay two cars are tied up with domestics or whatever, so towns wide open you know" (participant two)

Another officer noted that displacement depends on the motivation of a particular offender, and some offenders are not as motivated. In these cases, the offenders will not go to the extent of displacing their offending. In these instances, hot spot policing can be successful in reducing crime:

"[displacement] depends on a range of factors actually. It depends on the motivation of an offender, most of them are highly motivated but some offenders are very lazy. And they do as cops say, "shit close to where they live". So, you know they will just walk down the road to their dairy because they are too lazy to go anywhere else. So, in those instances it may stop" (Participants one).

This perspective on the motivated offender closely relates to the crime opportunity theories of rational choice (Clarke & Cornish, 1985), routine activity theory and crime pattern theory (Brantingham & Brantingham, 1993). Firstly, the officers perceive those offenders as rational in their decision making, which is based on their own motivations. Moreover, the fact that police perceive offenders to engage in crime closer to where they live is interesting. This perspective ultimately reflects routine activities and crime pattern theory. Routine activities theory suggest that offenders tend to form mental maps of their awareness space, including common pathways around where they live, whilst engaging in their routine activities. Crime pattern theory suggests that when these awareness spaces combine with an opportunity, offenders are most likely to engage in crime. This theory has been supported by evidence on hot spots, as studies reveal that offenders are more likely to engage in crime that is close to their home (Johnson, 2014).

4.22 Theme Two: Implementation Issues

Interviewees discussed certain implementation issues that can arise because of hot spot patrols. Firstly, the quality of hot spot policing can vary considerably across different police officers. Participants believed that the term 'directed patrol' is very generic, having different meanings for each police officer. Therefore, the quality of the patrols can vary dramatically. The difference between a proactive officer and lazy police officers was distinguished by one participant:

"You know, sometimes proactive cops who are highly motivated will actually park their vehicles, walk around, speak to members of the community... And then unfortunately you have your lazy cops that will just see 'directed patrol'. They don't really want to do anything else, but they just want to drive the car and you know... maybe wanting to look good or something like that, by wearing the uniform. It doesn't really achieve anything, but unfortunately police do that" (participant one).

Participants believed that the quality of hot spots policing depends on how proactive a police officer is. They believed that for patrols to be effective, the officers need to be fully engaged when they are patrolling:

"Actively patrolling, not sitting in the car and driving in circles" (Participant three).

A police officers training was seen as a key factor in determining levels of motivation. One participant stated that they were trained by a senior officer that promoting proactive patrolling, using techniques such as driving slowly and quietly to hear what is going on around the area. They compared this strategy to other officers, that simply sit in the car and lack engagement:

"So, it's just like street craft really. Like you know, it often comes back to how you were trained... I had a senior officer that we spent night shift with the windows down, the commercial radio off... drove slowly and quietly and could actually see what was going on. That's completely different to other cops, who are half asleep, windows up and heater on and more FM or the rock blasting" (participant two)

Similarly, officers stressed the importance of engaging in foot patrols around the hot spots, actively building relationships with the community. This was viewed to be advantageous in terms of generating intelligence:

"You have got to get out and talk to people rather than just drive down the main street" (Participant three).

"Actually, having those little techniques, like talking to locals. Getting out of your car. We sort of talk about criminal informants, but there's a lot of community informants and they are the

eyes and ears that can link into that patrolling. So, if you aren't stopping and talking to them and haven't got that situational awareness, patrolling with intent... that's a big difference to a couple cops shooting the shit and eating a pie, driving down the street with windows up" (Participant two)

Overall, the officers believed that for hot spots policing to be effective, police officers need to be actively patrolling. They believed that the quality of hot spots patrols can vary, as patrolling can differ based on the motivation of an officer. Several examples were provided to compare the officers that are highly motivated and proactive, compared to other officers who lack engagement. Participants also stressed the importance of using foot patrols, as it increases engagement with the area and the community.

4.23 Theme Three: A Resistance to Organisational Change

Another theme that emerged from the interviews was that some officers are resistant towards change, including organisational reform and evidence-based policing strategies. The traditional hierarchical structure of the police organisation was highlighted by one participant. Change is often implemented from the top-down, with frontline police officers at the very bottom of the hierarchy:

"Yeah, I think in the police culture, there's kind of like layers. You know, we have got our police executives, the high up making all these decisions on the direction of the police...they have got the positive mindset of you know, wanting to take the police in this direction of high performing policing, evidence-based decision making and breeding a good culture through all of these good courses. And on the other side, the very low end, we got our constables. Our coal face..um frontline workers" (participant one).

However, it was the middle layer of the police organisation, such as senior officers that were viewed to be more resistant towards change in the organisation. Participants believed that senior officers tend be more cynical and resistant towards organisational reform. The example of the high-performance framework in the New Zealand police was deemed complex for senior officers. This middle layer was also viewed to have less job satisfaction:

"It's this middle layer, of our sergeants, our senior sergeants. They sometimes don't agree with what the executives say, and they have that low job satisfaction. The ideas that the executives come up with, being the high-performance framework, is too complicated for them, they just flob it off because it's not kept simple" (participant one).

The middle layer, including sergeants and senior sergeants tend to resist changes such as hot spots policing and crime statistics because they prefer to have autonomy over their own area. This includes sergeants keeping on top of the local intelligence within the area:

"And I think it comes down to that sergeant level because you'll have different sectional sergeants that some are more proactive than others...because they do keep on top of the intel

and what's going on... they will be running a decent fall in... saying you know, this is who we need to keep the lid on and so forth, whereas other sergeants simply aren't that proactive" (participant two).

Furthermore, the issue of cultural resistance, including the disconnect between the street-level and management was highlighted. One participant stated that some officers actively resist changes implemented by the police headquarters and management:

"[some officers] don't really want to adopt, you know, all the new approaches and all the new ideas that the bosses and headquarters are bringing out. They would rather just stick in their own way and do their own thing because they think it works for them" (participant three).

There have been major changes to policing in New Zealand over time. The loss of discretion in policing was noted by one officer. They felt frustrated that their discretion was lost, providing an example of family harm incidents:

"Yeah, and policing has changed. You know, it all started with family harm... we just used to call them domestics. We just used to be able to get rid of jobs basically through comms. And then that was changed... all of a sudden, you couldn't. You had to report it, even if it might have not been a big thing. So, your discretion got taken off you" (participant two)

Overall, it is evident that policing has changed over the years, however many officers are resistant towards adopting change. The hierarchical nature of the organisation was highlighted, including the top-down approach to implementing major decisions and changes. Senior officers, including sergeants and senior sergeants were viewed to be the most resistant towards changes in the organisation. The officers that tend to resist changes do so because they prefer using their traditional approaches or the change is too complicated for them. Similarly, participants believed that some officers are resistant towards research in the policing environment. One participant noted that experienced officers tend to stick with the strategies that they know best. However, they believed that this is a negative mindset, and these officers should be more open to adopting change:

"A lot of cops have been around the job for a while and they tend to do what works for them, being whatever it is... I think we should be weaning out of that mindset, and you know, adopting this new approach" (participant one).

Furthermore, participants believed that there is a disconnect between intelligence led policing and police local knowledge. They stated that it is common for police officers to have more confidence in their own local knowledge, rather than follow the instructions from researchers:

"They see a report from intel saying go patrol this area, however they will go do their own thing" (respondent one).

Furthermore, another reason why officers may resist hot spot policing is because of the language used on the reports. One participant expressed that some officers feel patronised, as the intelligence reports they receive are too simple. They stated that officers often find humour in them, ultimately causing a lack of confidence in intelligence teams:

"It's probably a little bit of a thing with language and I think this is why some officers on the street feel a bit patronised. So, within the intel world, they have their structured reports. And some of the language they use, we used to laugh...they used to send out stuff like 'Friday night outside this sports event it is likely there will be theft ex cars'...It just sounds really cheesy. It's like common sense... like really? Of course, there's going to be theft-ex cars outside a rugby game on a Friday night. It comes across really badly, and that's when officers on the street look at it and think, oh my god, I could work that out. What are intel doing" (Participant two).

Another officer suggested that the research and intelligence is at odds with the experiences of frontline: Participants also believed that some officers knew their area better than some crime statistics. They expressed that officers tend to value local knowledge:

"Keeping in mind, some cops have been around the area a little longer than others, or some constables have connections with the community, they may get informal information...so it may not be put through intel, there may not be active jobs in the police system, but it is local knowledge" (participant one)

"You got to trust the guys on the street, like those officers, they know the spots throughout nightshift where stuff happens and where stuff doesn't you know" (participant two)

Therefore, this finding reveals that some officers tend to resist changes implemented in the organisation. This includes a certain level resistance towards organisational reform and research-based policing. Some officers tend to resist changes imposed by both management and researchers, as they believe that they know what works best for them. It was perceived that senior officers hold more cynical attitudes regarding organisational change; however, many officers fail to adopt and implement relevant research-based strategies. This includes hot spots policing implemented by intelligence analysts.

4.24 Theme four: Improving Hot Spots Policing for the Future

The participants provided advice on improving hot spots policing in the future. Officers believed that using different strategies (with patrolling) and improving organisational communication between researchers and police officers on the ground, may produce more effective outcomes.

Utilising different strategies

Although the officers acknowledged the benefits of visible patrolling, participants also believed that there was a need for other strategies to address the hot spot problem. One participant stated that hot spots policing often depends on the strategy of visible police patrols. However, they felt

sceptical regarding the strategy of patrolling a hot spot, believing that it does not address the root of the crime problem:

"Often we do something that makes us feel good. We have a problem. And we take that easy thing of 'oh we are going to patrol this area', and that's an easy answer. We feel like we have done something, but it's very haphazard like. Yeah, there's a commodore with bright stickers on it for two minutes, driving down a particular street. But in reality, what's the science behind that, and have we actually achieved anything?" (participant two)

Furthermore, instead of predominately patrolling an area, one participant felt that more problem-oriented policing (problem-oriented policing) strategies should be utilised. This includes using a problem-solving approach to address crime at the hot spot (Goldstein, 199). They provided a relevant example to emphasise the lack of problem-solving approaches used to address hot spots, including the problem with ram raids in their district:

"I was relieving as a response manager where we were having multiple ram raids on retail outlets in the CBD. The tasking of [Public Safety Team] was to patrol rural access roads to our town as the offenders were travelling here from [outside areas] to offend. I found out that we were not talking to Youth Aid Services and other officers who were dealing with the offenders in their hometowns and there was no plan to front them and deal with them. We were just waiting for them to offend and then responding. We needed a cross district and multi district plan which involved various work groups to tackle this group. So, in general my first question when we have hot spot type patrolling is what else are we doing proactively and how does patrolling integrate into our response..." (participant two)

Therefore, the strategy of patrolling was viewed to be a very surface level approach that does not address the root of the problem. To improve hot spots policing in the future, police officers should incorporate a problem-solving response at the hot spot locations. Other strategies, such as multi-agency approaches were regarded an effective way to improve hot spots policing in the future. This includes utilising other agencies, including Crime Patrolling New Zealand and security companies to help supplement police patrols:

"There are multiple different strategies that police should be utilising more often... New Zealand has multiple other agencies that can help out preventing crime. The obvious ones are security companies, we have lots of them. We also have crime patrolling New Zealand" (Interview one).

"Certain crime patrols are a huge asset... the police can say, these are the hot spots where crime is happening, can you guys, which is sometimes 40 of them, patrol these areas at these times...and this is very proactive" (participant three).

Therefore, one way in which hot spots policing can be improved in the future is to incorporate different strategies. These strategies could include utilising problem-oriented policing strategies as well as involving other agencies such as crime patrols and security companies to assist with patrolling hot spots.

Improving organisational communication

Officers believed that another way to improve hot spots policing in the future was to improve staff cooperation through the means of organisational communication. Officers believed that there needs to be more interaction between street level staff and research teams, including evidence-based policing. Currently, there is a perceived lack of effective organisational communication, regarding what the research teams do and what they are used for. One respondent stated that many officers do not know what evidence-based policing is. Therefore, it is important that these research teams frequently interact and engage with frontline officers to help build trust:

"A lot of people don't know what evidence-based policing is, as its quite new in the organisation. They don't know what they do, what they are for... that's why I think it's important that these newer units in police go around the districts. Introduce themselves and you know, do a presentation on their unit and why its beneficial... Getting that communication going and building the relationships with the districts... there needs to be that communication to work efficiently" (participant one)

Furthermore, officers highly value organisational communication, in the sense that police need to fully understand the rationale behind the hot spot policing. Officers stated that to improve cooperation to these strategies, they need to understand the reasoning behind them:

"I think that... Whoever is making these decisions on where police should be directing their patrols, that they really inform the reasons why they are doing them" (participant three).

It is evident that there is a lack of organisational communication regarding hot spots policing. Officers felt frustrated with the ways in which information was communicated by management. They felt dissatisfied with the fact that they receive brief information regarding hot spots policing. Officers would prefer to be provided further information regarding the strategies. This includes providing officers with the evidence and research on hot spots policing, to help achieve their cooperation with the strategy.

As police, we will receive brief information. Go to this place at this time, complete a directed patrol. They really need to delve into why we are going there at this time... and backing up those conclusions with the data" (participant one).

Like a lot of the time, we just sit in the office, and you know, these things are just thrown in our face. And it's like woah... well, what is this?" (Participant three).

Similarly, if officers were to be provided information on a long-term strategy to address that hot spot, it could improve police cooperation. This is mainly due to officers feeling sceptical regarding the effectiveness of visible patrols alone. One participant stated that having a master plan will subsequently improve uptake:

"It's that integration of solution. Like if you were saying to the officers hey, do this patrolling, however it links into this and that...where we are also developing informants around this and we are going to be doing search warrants on these key offenders...if they know it's part of a master plan rather than this haphazard "might do something" approach" (participant two).

The importance of organisational communication was emphasised, as having effective communication was viewed to directly impact the motivation levels of police. If officers were to fully understand the reasoning behind their deployment, as well as its effects on crime and the community, this would improve the motivation of police officers:

"We will talk about like hot spots and they just become cliché. So, it's just about motivation isn't it... officers join the job to help people and they want to, so it's about understanding the impact of the offending, who its affecting, and how their involvement can actually improve things for the community or the victims of that offending. And that's when you get the buy in... people are quite motivated you know" (participant two).

Therefore, officers believed that integrating other strategies into hot spots policing and improving organisational communication will improve officer commitment to the strategy. Using problem-oriented policing principles and multi-agency approaches were seen to be effective hot spots policing strategies that can mitigate the limitations of patrolling. The importance of informational justice was expressed, as police officers are currently dissatisfied with the current processes of communication. Research groups such as evidence-based policing and intelligence analysts should increase engagement with frontline officers, to help encourage a partnership and build trust with police. Furthermore, officers on the ground should be provided more information and evidence regarding hot spots policing. These strategies were viewed to help improve police officer commitment, ultimately improving the practise of hot spots policing in the future.

Chapter Five: Discussion

5.0 Introduction

The aim of the study was to explore the attitudes of sworn New Zealand Police staff toward the use of hot spot policing as a crime prevention strategy. The key research question that guided the study was: What are the attitudes of police officers' toward doing hot spot patrols in New Zealand? The study used a mixed methods approach, an online questionnaire and semi-structured interviews were employed to understand police officer perceptions of hot spots policing.

Overall, the results indicate that the attitudes of the officers' that participated in the study are complex and multifaceted. The data suggests that officers were generally accepting of hot spot policing, noting the various advantages it can provide. Officers believe hot spot policing can produce benefits such as: reducing crime, improving police and community relations and intelligence gathering. Simultaneously, whilst officers recognised the benefits of hot spot patrols, more critical and pragmatic attitudes were also expressed. Officers discussed potential unintended consequences, such as displacement. Certain operational aspects relating to hot spot patrols, including implementation issues were discussed. Officers also noted current organisational and cultural barriers that are related to the success of hot spots policing. This chapter discusses the major findings of the current study through combining both the quantitative and qualitative results, as well as examining the results in relation to the existing literature.

5.1 Positive Attitudes Exist

In the current study, participants generally expressed positive views toward hot spot policing and its effect on crime. The results indicate that officers acknowledge the crime control benefit of hot spots patrols. For instance, quantitative data from the questionnaire indicates that 60 percent of respondents agreed or strongly agreed that patrolling a crime hot spot was effective at reducing crime. This result indicates that a large proportion of participants held positive attitudes towards its efficacy as a crime control strategy. The qualitative comments from the survey explored the attitudes of police officers further, highlighting some of the reasons why participants believe it to be effective at reducing crime. For instance, the focus on identifying hot spot locations through crime mapping technology was deemed as an efficient way to deploy police resources. Police officers that took part in the study had considerable experience with using hot spots policing as a crime control strategy and some respondents expressed their support for hot spot policing through providing examples of their own personal successes with the strategy. Participants also expressed their support for hot spot patrols on the basis that they believe they promote community reassurance and deterrence. Overall, the attitudes of police

officers towards crime control effects aligns closely with the current literature and scientific evidence on hot spots policing. There is currently a strong body of evidence to suggest that hot spot policing is effective at reducing rates of crime and disorder (Braga et al., 2019; National Research Council, 2004; Sherman & Weisburd, 1995). Furthermore, existing literature on police officer attitudes towards hot spot policing also produced similar findings. Previous attitudinal studies found that police officers generally viewed hot spot policing to be an effective strategy to reduce crime and disorder, with officers acknowledging the benefits (Haberman, 2016; Mugari & Thabana, 2018; Haberman & Stiver, 2020).

Although officers acknowledged the benefits of hot spot policing and its crime control benefits, they generally expressed support for hot spot patrols being short and frequent rather than longer sustained periods. The results from the questionnaire indicate that officers commonly viewed hot spot policing to be most effective with short but frequent patrols. Overall, 30 percent of respondents stated that patrols should be between 10 to 15 minutes but visiting a location frequently throughout a shift. This was because 10-15 minutes was viewed to be a practical amount of time to promote visible within the area. Officers also believed that it is important that these patrols are carried out frequently to prevent offenders from learning the police routine. This finding strongly reflects the results of previous studies on optimal dosages, particularly the Koper Kurve principle (Koper, 1995). Koper's findings suggest that the optimal dosage of police patrols in a hot spot was 10-15 minutes on a frequent basis. Existing research on police officer attitudes also found that officers tend to prefer rotated and frequent patrols to maximise deterrence (Ratcliffe & Sorg, 2017; Haberman & Stiver, 2020).

Officers also held positive attitudes towards the effects of hot spot foot patrols, especially on police and community relations. Overall, 92.3 percent of respondents agreed that hot spot foot patrols help to improve police and community relations. Therefore, the vast majority of respondents believed that foot patrols improved relationships with the community. Furthermore, officers provided qualitative evidence of their own positive experiences when conducting hot spots foot patrols. Furthermore, officers believed that foot patrols were effective for reducing public fear of crime and intelligence gathering. Officers frequently discussed that foot patrols are useful in terms of gathering local intelligence about crime in the area. This finding ultimately reflects other attitudinal studies on foot patrolling, which found that officers perceive foot patrols to be very beneficial for police community relations, fear of crime and intelligence gathering (Haberman & Stiver, 2020; Mugari & Thabana, 2018).

Overall, the findings reveal that officers do acknowledge the benefits of hot spot patrols, with views reflecting the current evidence on hot spot policing. However, it is important to note that although officers were supportive towards the strategy, some aspects of the qualitative data

reflected critique of its use, including organisational and operational problems. Therefore, this suggests that although officers held positive attitudes towards hot spots policing and its effects on crime and the community, they also believed that there were certain aspects which need to be improved.

5.2 Sceptical Attitudes

Although officers in the current study generally supported hot spots policing, more sceptical and negative attitudes were also expressed. Some officers discussed the potential limitations of the strategy. These limitations included: patrols being a haphazard response and crime displacement.

Patrolling: A haphazard response

Officers were sceptical regarding the implementation of hot spots policing, with the primary strategy being police patrols. Some sceptical attitudes were expressed regarding visible police patrols. The current evidence on hot spots policing states that police departments often resort to using police patrols to address hot spots (Rosenbaum, 2006). The findings of the current study suggests that some officers believe patrolling can be a surface level approach, and that police should utilise more problem-solving approaches to address the problem at hand. This perspective aligns very closely to the current literature on problem-oriented policing. For instance, Rosenbaum (2006) described hot spots policing as "old wine in new bottles" (p.320), emphasising that the strategy is ultimately resorting to traditional policing tactics and ignoring more innovative strategies. The fact that police officers believe patrols to be a shallow response is also consistent with Sherman's (1990) crackdown theory, which indicates that a police crackdown often has a short-lived impact, concluding that "Like aspirin for arthritis, the painkiller does nothing to remedy the underlying condition" (Sherman et al., 1995, p. 777). Furthermore, problem-oriented policing responses have often been ignored in the field of hot spots policing (Rosenbaum, 2006), with visible patrols being described as superficial responses that are both predicable and narrow (Rosenbaum, 2006). Therefore, perspectives align closely with the problem oriented policing literature (Goldstein, 1990). This could have potential implications for future policy and practise. Police departments and practitioners could seek to employ more problem-solving methods (combined with visible police patrols) to address hot spot locations. However, future studies should seek to explore officer attitudes towards different strategies used for hot spot policing, including problem-oriented policing approaches.

Displacement

The second critique of hot spot policing noted by participants was the issue of crime displacement. The possibility of displacement was a factor in shaping some of the officers' attitudes towards hot spots policing. Data from the questionnaire suggests that there were mixed attitudes towards directed patrols resulting in displacing crime. Overall, the findings were very conflicting, with 31 percent disagreeing that it causes displacement and 30 percent agreeing that it did. Furthermore, 29 percent were neutral in their views. The fact that the findings were mixed was an interesting finding, as this ultimately reflects the current body of literature on displacement. Overall, the current literature on hot spots policing and displacement is also mixed and inconclusive (Rosenbaum, 2006). Some studies have found the effect of displacement to be relatively small compared to the crime prevention benefits caused by hot spots policing (Braga et al., 2014; Weisburd & Telep, 2014). On the other hand, there is evidence to suggest that displacement can occur (Sherman and Rogan 1995; Rosenbaum, 2006; Braga et al., 1999). However, current studies on displacement are not without limitations. Implementation problems in hot spots experiments cause validity issues as well the complex nature of displacement makes it very difficult to measure (Weisburd & Green, 1995). Therefore, the finding of the current study ultimately reflects the complex nature of displacement, reflecting a strong need for future studies on displacement effects.

Although the quantitative results showed conflicting opinions on displacement, the qualitative data from both the questionnaire and interviews offers some insight into the views of police officers. Although officers may view hot spot policing to be an effective strategy, some officers held concerns regarding the potential issue of displacement in the long term. The motivation of an offender was viewed as a key factor in offending. The findings suggested that officers believed both temporal and spatial forms of displacement were a consequence of hot spots policing (Repetto, 1976). This finding is similar to the results of Haberman and Stiver's (2019) study on hot spot policing, where police officers generally did believe hot spot policing was an effective strategy, however a common critique was that it resulted in spatial displacement. Furthermore, the finding reflects the attitudes of police officers in the Philadelphia foot patrols experiment (Ratcliffe et al., 2011). This study found that officers strongly believed that motivated offenders are aware of their schedules and displacement was a problem that would ultimately outweigh the benefits caused by the foot patrol. Discussions regarding displacement were common throughout the Philadelphia experiment, with a field researcher stating that: "They believe that it [foot patrol] prevents crime within the small area their beat is but not in general. They think that there is a displacement effect" (Ratcliffe & Sorg, 2017.P.59). Furthermore, another finding of the current study was the support for a patrolling system which includes frequent and random patrols to prevent any displacement effects. This finding is also similar to the results of the Philadelphia Experiment, where officers believed that offenders often become aware of their routines, therefore they felt that their patrols should be frequent and rotated to keep criminals on their toes and prevent displacement (Ratcliffe & Sorg, 2017). Therefore, the findings of the current study are consistent with the current literature on hot spots and displacement. The evidence is currently mixed and inconclusive, which reflects the conflicting findings of this study. However, the qualitative evidence and previous research on police officer attitudes provides further insight into the idea that displacement is a possibility. In summary, issue of displacement is a common discussion point in hot spot policing evaluations, however there is a strong need for future research on the phenomenon.

5.3 Implementation Problems

On a more operational level, officers commonly discussed problems related to the current implementation of hot spot policing in the New Zealand Police. Hassall and Lovell (2015) describe the fundamental elements that determine a successful intervention. This includes adherence to the design and methods, dosage, and quality of delivery. However, the findings of the current study suggest that these elements are not currently being met for hot spots policing in New Zealand. Firstly, the adherence to the design is lacking, as some officers may patrol completely different areas. Secondly, the dosage of the delivery seems to be inadequate, with some officers not conducting the hot spot patrols at all. Thirdly, the quality of the delivery is especially being affected and was seen as one of the biggest challenges to the successful implementation of hot spot patrols. The lack of quality patrolling was directly related to the lack of proactive patrolling. Furthermore, the strategies in hot spots varied considerably by individual officers, with some officers being more motivated than others. Therefore, the quality of patrolling is dependent on the motivation of the individual officers, which ultimately results in differing police strategies. Furthermore, officers were frustrated with the current implementation of hot spots policing. Some respondents believed that officers were being deployed to incorrect hot spot locations, wrong time of day and targeting the wrong crime group. The fact that some officers disagree with their deployment may in turn, cause reduced uptake and impact the success of the intervention. However, this finding may also reflect more of a deep-rooted cultural problem, which includes the distrust that police officers have towards research and evidence (Telep and Winegar, 2016; Telep and Lum, 2014). This cultural problem is discussed further in the following section.

These implementation challenges are not exclusive to hot spots policing in New Zealand. Previous hot spot policing experiments have also reported similar implementation issues (Sherman & Weisburd, 1995; Ratcliffe & Sorg, 2017). For instance, officers in both the Philadelphia and Minneapolis experiments were often left to determine their own tactics at the

hot spot, which varied considerably by individual (Sherman & Weisburd, 1995; Ratcliffe & Sorg, 2017). This has serious implications on the research and evaluation processes of hot spots policing, as inconsistencies can cause issues for researchers when it comes to evaluating the effects of the intervention (Haberman, 2016). Therefore, it is apparent that the implementation of hot spots policing comes with various challenges, including officers failing to adhere to the design itself and failing to deliver adequate dosages and quality patrols. It is crucial that researchers and police leaders maximise communication through the delivery of clear and consistent instructions and objectives regarding the expectations of the hot spot interventions, including the required dosage and quality of patrols.

5.4 Organisational factors

Officers in the present study noted the lack of police resources to be a major organisational factor related to hot spots policing in New Zealand. For the present study, limited resources were a source of concern for police officers conducting hot spot policing. This is mainly due to increasing demand, reactive jobs, and a shortage of police staff. This finding aligns with the previous studies on the implementation of evidence-based policing strategies, which has identified the lack of police resources to be a factor (Kalyal, 2020). Furthermore, the constant pressure on officers to respond to reactive incidents creates conflicting demands and increased workloads. This increased demand and stress can ultimately cause officers to resist any additional taskings (Kalyal, 2020). On the contrary, the literature on hot spots policing states that the strategy optimises the use of scarce police resources (Telep & Lum, 2014). Hot spots policing is the focus of police resources on very small areas, which studies have found to be much more resource efficient compared to policing a larger geographical area (Weisburd and Telep, 2014). Therefore, the current study suggests that although officers may hold positive attitudes towards hot spots policing, it is currently not being prioritised on the front-line. This is mainly due to the pressure on frontline staff to respond and react to emergency incidents. Furthermore, many officers believed that hot spots policing should not be the job of frontline staff, due to their workload. This finding has implications for future policy and practise. This could include police departments maximising resource allocation through assigning hot spot patrols to workgroups that are not on the frontline.

Lack of Organisational Communication

Officers in the current study felt that they should be included within the decision-making processes in when identifying hot spot locations. For the statement "police patrols should be guided through crime statistics" the mean was 3.55. Therefore, feelings skewed toward neutrality. The qualitative data suggested that officers felt that a range of methods and data should be utilised to guide hot spot policing, including police intelligence and information from the community. This view is consistent with Rosenbaum's (2006) critique, stating that hot spot

analysis should include incorporate a range of sources, including the triangulation of crime data with census, police knowledge, survey, interview, and observational data. Previous studies have found that discretion and autonomy are important aspects in policing, linking to police officer job satisfaction. Police officers tend to work the most efficiently in an environment where they can exercise a considerable amount of discretion (Johnson, 2012). For participants, this included making their own judgements about where the hot spots are in the community, stating that too often hot spot policing limits their discretion. Wain et al., (2017) also found that officers disliked hot spot policing as they believed it reduced their discretion and autonomy in their job. This finding ultimately highlights that police officers enjoy having a considerable level of autonomy in identifying relevant hotspots, particularly in smaller areas. Therefore, aligning hot spot policing evaluations with the knowledge and experience of police officers would undeniably increase cooperation towards the strategy.

Another important finding was the lack of organisational communication regarding hot spots policing. Due to the traditional hierarchical structure of the police organisation, most policing strategies are implemented top-down (Haberman & Stiver, 2019). This structure presents a significant barrier to open communication, as information tends to percolate through the ranks to street-level officers (Weiss, 1997; Haberman & Stiver, 2019). The lower ranking police officers are then expected to be committed to the initiative (Weiss, 1997; Haberman & Stiver, 2019). Officers in the current study expressed frustration as they seldom receive additional information regarding the reasoning behind the deployment. This finding is consistent with the results from the Philadelphia hot spots experiment, which found that relevant information discussed in management and research meetings was not effectively communicated to officers. Furthermore, higher ranking officers rarely communicated the goals or measures of the initiative to street-level staff (Ratcliffe & Sorg, 2017).

Previous studies on organisational justice have revealed a link between staff attitudes and their perceptions of fairness and respect shown by management (MacQueen & Bradford, 2017). Having a lack of communication can also have significant implications for practise. This includes a lack of cooperation with strategies such as hot spot policing, as well as reduced uptake (Haberman 2016; Kalyal, 2020). This is because police officer attitudes and behaviours are subsequently shaped by perceptions of fairness and respect shown by management and the wider organisation (MacQueen & Bradford, 2017). Furthermore, having open communication ultimately helps improve cooperation and increase uptake (Rosenbaum & McCarty, 2017). Thus, at the organisational level, it is crucial that there is open communication and training regarding any new changes and initiatives for police officers.

The study found that officers would prefer to be involved in the design and planning phases for interventions that will affect them. This includes being given any opportunity to provide their knowledge, suggestions, and feedback on the strategy. This important finding has various implications for organisational policy and practise. Police management and leaders should provide clear communication regarding the reasons why certain decisions are being made, including the reasoning and justification for hot spot policing. As Martin and Mazerolle (2016) state, for evidence-based policing to succeed, management must invest 10 percent of their budget into adequate training and education of staff. Therefore, it should be best practise to ensure lower ranking officers clearly understand the rationale behind any new changes, which could include the provision of relevant statistics and actively involving them in key processes. This would increase the level of commitment and engagement from staff, therefore improving commitment to hot spots policing.

5.5 Police Culture

A level of cultural resistance was an important finding the current study. The organisational culture of police is described as a set of shared values amongst the members, which can ultimately affect the way in which police accept changes (Paoline, 2004). Previous studies indicate a level of institutional resistance towards the integration of research and other innovative strategies into the police environment (Lum, 2009; Taylor & Boba, 2011). This resistance to research stems from the characteristics of the police culture, which is very conservative and tends to promote practises related to traditional and reactive policing (Kalyal; 2019; Telep and Lum, 2014). This section will firstly discuss the police loyalty to traditional strategies, moving onto police resistance towards research and academics.

A Loyalty to Traditional Policing Strategies

The conservative police culture which promotes loyalty to traditional policing methods was reflected through the findings of the current study. Overall participants expressed strong support for traditional policing, such as: rapid response policing, random patrols, and motorised patrols. Overall, 62.5 percent of respondents agreed with the questionnaire statement that random (undirected) patrols around the community are effective at reducing crime. Furthermore, 54 percent of participants agreed that a rapid response to 111 calls is effective at reducing crime. Random motorised preventative patrols and a rapid response to calls of service was viewed as an important focus for traditional policing from the 1950s (Ratcliffe & Sorg, 2017). However, a key study on these standard strategies found that they have very little impact on crime reduction (Kelling, 1974). Therefore, police perspectives on traditional strategies are ultimately in contrast with the current scientific evidence.

The current study also found that 58 percent of officers preferred vehicle patrols compared to foot patrols, mainly due to the ability to respond to jobs and cover more ground. It is not surprising that most police prefer patrolling in a vehicle, as the nature of the frontline police work is to ultimately respond to emergency calls of service. The emphasis is placed on responding as quickly to the public as possible, in line with public expectation and to avoid any backlog on the system (Ratcliffe & Sorg, 2017). Extreme pressure on frontline staff to respond to emergency calls of service undoubtedly contributes to shaping the attitudes of police officers. This includes constructing the common perception that random patrols and reactive policing are effective crime control strategies. As Ratcliffe and Sorg (2017) state, that advising police to be proactive and conduct foot patrols can be an unrealistic expectation. This is due to the constraints of the police system that places emphasis another metric, being the focus on the response and disposal of jobs in the system. As reactive and response work takes up the most of frontline officer's time, it is unsurprising that police perceive it to have value as an effective crime control strategy. This finding is not uncommon within policing research. Other studies have also found that police officers tend to value traditional reactive work, such as rapid response to emergency calls and arresting offenders (Telep & Lum, 2014; Ratcliffe & Sorg, 2017; Haberman & Stiver, 2019).

The misconception that reactive policing and random patrols are effective, could also be a consequence of the "crime fighter" label which is also a facet of police culture (Brown, 1988; Paoline, 2003). The crime fighter image is still today viewed by the police and public as the main purpose of police work (Paoline, 2003). This was also reflected throughout the qualitative data, with some officers expressing unfavourable attitudes toward the nature of police work today, highlighting the amount of time spent on paperwork and jobs focused on mental health and family harm. Frustrated attitudes were expressed towards the reality of this police work, with officers using terms such as "metal health workers" to describe their role. The reality of policing ultimately conflicts with the historical crime-fighter image and action-orientated culture that is still heavily embedded within the police culture (Brown, 1988; Paoline, 2003). Therefore, this crime fighter image ultimately could shape officers' perceptions that these realities of the job are not real police work (Paoline, 2003).

Resistance to research

The findings of the current study suggest a level of disconnect between research and practise in a police context. Studies on police culture have indicated that police officers tend to resist changes and reform in the organisation (Chan, 1997). This includes the integration of evidence-based decision making into the policing environment (Lum, 2009; Taylor et al., 2007). Research on police culture has found that police tend to hold a level of cynicism and suspicion towards outsiders (Reiner, 2010). The solidarity of police culture has emphasised an "us and them"

culture between police and researchers (Waddington, 1999. P. 287). This was also a finding of the current study, as some officers expressed resistance towards integrating researchers into the police context. This finding reflects that of previous research which has found that police officers tend to believe that researchers are unable to understand police work. This was due to the practical view that research cannot be generalised to every case (Sherman, 2013; Mastrofski & Willis, 2011). The qualitative data provided evidence that officers valued their discretion and autonomy, believing that in some instances, they knew their area better than statistical data. This hostility may also be caused by a component of police culture, which is characterised by a "police know best" mentality (Kalyal, 2020. p.10). Studies have found that police tend distrust research evidence as they consider themselves the experts on crime, thus more than capable of doing their job without any external interference (Cullen et al., 2009; Mastrofski & Willis, 2011). This also reflects findings of the current study, with officers expressing support for their own authority in their job.

Another finding was that senior officers (sergeants and senior sergeants) are more likely to hold negative attitudes. Qualitative data provided some insight into the resistance that some senior officers express towards changes in the police organisation. Studies on police culture also found that the attitudes of senior officers tend to be more cynical and resistant towards change (Chan, 1997). Other studies have proved this link, with senior officers being more likely to resist changes, such as the ongoing shift towards evidence-based policing practises (Lumsden, 2017). Therefore, as hot spots policing is an evidence-based strategy, it is essential that support is achieved amongst senior officers. In a practical sense, researchers should work closely with senior members of staff, utilising their knowledge and advice to implement hot spot policing. This would likely improve the success of any future hot spots experiments as well as improve support and cooperation amongst police officers.

Police resistance to research has also been identified in previous studies (Sherman, 1984; Palmer, 2011; Hunter et al., 2015; Lumsden, 2017; Telep & Winegar, 2016; Telep & Weisburd, 2012). Firstly, police departments need to raise awareness on the importance of researchers and analysts within the police environment (Lum, 2013; Kalyal, 2020). Furthermore, researchers should seek to frequently engage with frontline officers, especially senior staff, involving them within decision making processes and regularly taking their perspectives into account (Kalyal, 2020). This would ultimately improve the relationships between researchers and police, which can help to improve police cooperation towards change and innovation (Kalyal, 2020).

5.6 Implications for Policy and Practise

The findings of the current study have various implications for policy and practise. The findings suggests that generally police officers are supportive of hot spot policing, however various

changes should be made to navigate some organisational and cultural barriers which impede its implementation. Previous studies have suggested that implementing a successful policing intervention essentially works from the ground-up, requiring the full cooperation and commitment from street level staff (Haberman & Stiver, 2019; Haberman, 2016). This cooperation can be achieved by involving frontline staff in the design phase of hot spot policing interventions (Haberman, 2016). This includes allowing officers to have a voice, listening to any concerns that police staff may have. Relevant practises that align with procedural justice principles includes increasing the transparency of decision making, accommodating the needs and preferences of officers (especially at the design phase of any intervention), and offering staff clear explanations as to the rationale behind any major changes made (Quattlebaum et al., 2018).

Organisational research states that officers who perceive their management and as transparent, respectful and fair are overall more likely to hold positive attitudes regarding implementing change and employing evidence-based policing strategies (Brimbal et al., 2020). Therefore, it is crucial that researchers emphasise the design and planning stages of an initiative, which should include engaging with key stakeholders, such as street level staff. This would help to improve cooperation and commitment to the intervention (Haberman & Stiver, 2019; Center for Court Innovation 2009). The clash of cultures between research and police is evident. Police officers tend to value evidence that is subjective and contextual, whereas researchers are more concerned with statistical evidence (Cope, 2004). Therefore, it is crucial to negotiate the differences between policing and research. Researchers and analysts should also seek to take into consideration a range of data sources, including police knowledge. Drawing upon the officer's local knowledge and skills, allowing them the opportunity to provide suggestions and advice for the intervention is crucial. Therefore, this would ultimately help to integrate research into policing and help to produce a mutually supportive working relationship between the two cultures.

Furthermore, ensuring a mutually beneficial relationship between researchers and police officers on the ground, is crucial for the success of hot spots policing. It is a concerning finding that many frontline officers simply do not know what evidence-based policing is, considering it is an important aspect within New Zealand Police. Therefore, if more officers were to understand the principles behind evidence-based policing and the advantages, this would help to improve cooperation towards research led policing. Therefore, to achieve maximum cooperation toward evidence-based policing strategies, such as hot spots policing, it is critical that officers perceive their organisation and management as procedurally just (Quattlebaum et al.,2018). This means improving transparency and informational justice in the way of including officers within discussions and providing the opportunity for their suggestions and advice. The findings also

suggest that further training and education are also important to facilitate a working relationship between researchers and police.

Chapter Six: Conclusion

In summary, this thesis explored the attitudes of police officers towards hot spot policing in New Zealand. Overall, there are findings from the study in which support previous studies, however it also presents additional new insights, specifically in the New Zealand context. This chapter will present the conclusions of the study, reflecting on the results of the study and discussing their significance. It will then discuss possible limitations as well as implications for policy and practise. Recommendations for future research will then be highlighted.

6.0 Major Findings

This study sought to explore the attitudes of police officers toward hot spots policing in New Zealand. The research question guiding the study was: 'What are the attitudes of police officers toward hot spot policing in New Zealand?'. The results suggest that attitudes were complex. Although police officers were supportive of hot spot policing and expressed awareness of the benefits, there were a significant number of negative and sceptical views, especially regarding potential limitations. Furthermore, officers discussed certain organisational and cultural factors which can impede the successful implementation of the strategy.

6.1 Strengths of the Study

Overall, this research is important as it provides an insight into the exploration of New Zealand police officer attitudes towards hot spots policing. It has provided a contemporary understanding into the views and feelings of officers, towards not only hot spot policing as a crime prevention strategy, but its implementation within an organisational context. There is currently a significant gap in the hot spots policing literature, with police officer attitudes remaining a largely under-researched area. Therefore, the study sought to address this gap, focusing on providing officers the platform to express their own views and experiences on the strategy. Furthermore, the few attitudinal studies that have been conducted are based overseas, therefore the current study is the first for the New Zealand police context. The qualitative aspect in this study also addresses a research gap as most hot spot policing evaluations have been predominantly quantitative tests and experiments. Exploring police officer views can ultimately help bridge the gap between theory and practise, gaining an insight into how well the theory of hot spots policing has been converted into practical applications.

6.2 Limitations of the Study

Although the study has various strengths, it also has considerable limitations. Therefore, the results must be interpreted with some caution. Firstly, there was a very small number of police officers interviewed. Due to a COVID-19 lockdown and research time constraints, the scope

was limited to the officers who contacted the researcher through email after taking part in the online survey, expressing their interest to talk about the topic further. Having a small number of interview participants could mean that the findings may not be generalisable or representative of the wider population of New Zealand Police officers. Although there were a small number of officers interviewed, nonetheless it provided a valuable aspect for the study, providing rich data in which helped to augment the survey results. It is also important to note that there was also a substantial amount of qualitative data in which emerged from the online questionnaire. With 76 comments, this provided a variety of responses and perspectives which ultimately was a significant strength for the study.

Another potential limitation of the study was that the sample of officers involved in the study were restricted to mainly Bay of Plenty and Waitemata districts. Due to the current hot spot policing experiment taking place in these districts, the mailing list to recruit participants was limited to officers working within these districts. Therefore, the findings may not be fully representative of the attitudes of officers in other districts.

6.3 Recommendations for Future Research

Overall, the findings of this study produce a meaningful insight into police officers' attitudes towards hot spots policing in New Zealand. However, there is a need for further research on this area. Firstly, future research should endeavour to overcome the limitations of the present study and widen the scope of the research to police officers based within different districts throughout New Zealand. This would help to gain a further insight into the attitudes of police officers based within other districts. Secondly, future studies should include a larger sample of police officers, which would ultimately help to increase the generalisability of the findings and produce deeper understanding of their attitudes. Future studies could also expand the research to understanding the receptivity of New Zealand Police towards evidence-based policing, as well as the factors that contribute to shaping their attitudes.

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Appendices

Appendix A: Questionnaire



Hot Spots Policing Survey

2. Directed Patrols

Thank you for agreeing to take part in this survey.

This section is designed to understand your perspective on directed patrols. The researcher is interested in *your own personal opinion*-your honesty is appreciated.

Directed patrolling: To add visible police patrols, whether by vehicle or on foot, in areas where crime is most expected (i.e. hot spots).

Please take some time to think about the following statements. Please indicate how much you agree or disagree with each statement.

- 1. Directed patrols (in a crime hot spot) are effective at reducing crime
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- 2. Random patrols (i.e. undirected patrols) across all parts of the community are effective at reducing crime
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- 3. Directed patrols only result in displacing crime (i.e. pushing crime to another time or location)
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- 4. A rapid response to emergency calls of service (i.e. 111 calls) is effective at reducing crime

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

5. Police patrols should be guided through crime statistics

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

6. Directed patrols reduce public fear of crime

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- 7. In your opinion, how long should police spend patrolling a hot spot?
- 8. What is your preferred method of directed patrol?
- Vehicle
- Foot
- Other
- 9. Why do you prefer this method?



Hot Spots Policing Survey

3. Foot Patrols

This section focuses on one specific patrol method: Directed foot patrols.

Directed foot patrol: Increased police foot patrols targeted to crime hotspot locations.

Please take some time to think about the following statements relating to directed foot patrols. The researcher is interested in your own personal opinion. There are no right or wrong answers.

10. Directed foot patrols help improve police and community relations

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

11. I have increased concerns for my safety when I am patrolling a hot spot on foot

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

12. Directed foot patrols are effective at reducing crime

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

13. Directed foot patrols help to facilitate intelligence gathering

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

14. Directed foot patrols reduce public fear of crime

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree



Hot Spots Policing Survey

4. Demographics

We would like to finish off the survey by asking a few questions about your background.

What is your current rank within the New Zealand Police?

- Recruit
- Constable
- Senior Constable
- Sergeant
- Senior Sergeant
- Inspector
- Superintendent

How long have you served as a sworn officer within the New Zealand Police?

- Under 1 year
- 1-3 years
- 4-6 years
- 7-9 years
- 10+ years

What is your age?

- Under 18
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

Do you police mostly urban or rural areas?

- Urban
- Rural
- Both

What police district are you based in?

- Waitemata
- Bay of Plenty
- Other

Do you have any other comments or feedback regarding hot spots patrols?



Date Information Sheet Produced:

24/11/2020

Project Title

Police officer receptivity to hot spot policing: A mixed methods study on police officer attitudes in New Zealand

Kia ora,

My name is Chloe Usherwood. I am a university student conducting a research project as part of my thesis for a Masters qualification in Criminology and Criminal Justice at Auckland University of Technology. The aim of the research is to explore the attitudes of New Zealand Police officers toward hot spot policing. I am also a current non-sworn employee of the New Zealand Police, working within the Prevention and Road Policing team for Police National Headquarters.

What is the purpose of this research?

The study seeks to understand your views and feelings toward hot spot policing as a policing strategy. The research question for the study is: What are the attitudes of police officers' toward doing hot spot patrols in New Zealand? The findings of the research will help contribute to understanding how receptive police officers are toward hot spot policing as a crime prevention strategy. These findings may be used for academic publications and presentations.

How was I identified and why am I being invited to participate in this research?

You are invited to participate in the research because you are a police officer who has taken part in the hot spot policing pilot project by the Evidence Based Policing Centre (evidence-based policingC). You have been contacted because the evidence-based policingC has identified you as an officer who has taken part in this project. This was an inclusion criteria for the study, based on the fact you have had some experience conducting hot spot patrols.

How do I agree to participate in this research?

Your consent is implicit in the completion of the survey. You can withdraw from the survey at any point until your responses have been submitted; that once this has occurred, however, your data cannot be identified or withdrawn. Whether you choose to participate will neither advantage nor disadvantage you. If you agree to participate, please click on the link within the email and it will take you to a wevidence-based policingage where you can complete the short survey. This will only take approximately 5 minutes to complete.

What will happen in this research?

If you agree to take part, you will complete a short survey on your personal view toward hot spot policing and foot patrols. The survey will ask you to indicate your level of agreement or disagreement with statements relating to hot spot patrols. If you do agree to take part in the study, your responses will be completely anonymous.

What are the discomforts and risks?

The research provides no risk to participants. The confidentiality and anonymity of all participants is guaranteed.

What are the benefits?

This research will contribute toward a student's thesis research as part of a Masters Qualification. The study will also provide you with an opportunity to provide your perspective on hot spot policing, which may help inform and improve future hot spot policing projects.

How will my privacy be protected?

The survey responses are completely anonymous and unidentifiable.

What are the costs of participating in this research?

There are no financial costs associated with participation in the study. I will only ask of 10 minutes of your time, which includes reading and completing the survey.

What opportunity do I have to consider this invitation?

You will have two weeks to consider the invitation to take part in the survey.

Will I receive feedback on the results of this research?

A shared link is provided so you can access the findings of the study.

What do I do if I have concerns about this research?

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, ethics@aut.ac.nz, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Name: Chloe Usherwood,

Email: chloeusherwood@outlook.com

Project Supervisor Contact Details:

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor:

Name: John Buttle,

Email: John.Buttle@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 13/05/2021, AUTEC Reference number 20/414

Appendix C: Recruitment email (Survey)

Invitation to participate in a research project

Kia ora,

I invite you to participate in a short survey for a research study entitled: Hot Spots Policing in New Zealand: A mixed methods study on police officers' perspectives.

I am a Masters student completing the Criminology and Criminal Justice program at Auckland University of Technology, and currently in the process of writing my thesis. I also work part-time within the burglary prevention team for the Waikato District.

You are invited to participate in the research because you may have been involved in the recent hot spot pilot conducted the Evidence Based Policing Centre. This was an inclusion criteria for the study- based on the fact you have had some experience doing hot spot patrols.

The research question for the study is: What are the attitudes of police officers' toward doing hot spots patrols in New Zealand? Hot spots patrolling is to add visible police patrols, whether by vehicle or on foot, in areas where crime is most expected (i.e. hot spot locations). It is commonly referred to as *directed patrolling (3M)* in New Zealand.

What is the purpose of the research? The survey is designed to tap into officers' feelings and opinions regarding using hot spots patrols as a crime prevention strategy. In order to help improve policing strategies, it is crucial that front-line officers have a voice and can actively participate in the dialogue around adopting these prevention strategies.

Your participation in this research is completely voluntary (it is your choice). It is also completely anonymous and confidential- none of the responses will be connected to identifying information.

If you would like to receive more information regarding the research, please follow the link below to access the information sheet, which details further information regarding the

https://www.surveymonkey.com/r/PK5NB3Y

If you have any further questions or concerns, please do not hesitate to contact me.

Thank you in advance.

Kind Regards,

Chloe Usherwood



Participant Information Sheet

Date Information Sheet Produced: 1/05/2021

Project Title: Hot Spots Policing in New Zealand: A mixed methods study on police officers' perspectives

Kia ora,

I am a university student conducting a research project as part of my thesis for a Masters qualification in Criminology and Criminal Justice at Auckland University of Technology. The aim of the research is to explore the attitudes of New Zealand Police officers toward hot spot policing.

What is the purpose of this research?

The study seeks to understand your views and feelings toward hot spot policing as a policing strategy. The research question for the study is: What are the attitudes of police officers' toward doing hot spot patrols in New Zealand? The findings of the research will help contribute to understanding how receptive police officers are toward hot spot policing. These findings may be used for academic publications and presentations.

How was I identified and why am I being invited to participate in this research?

You are invited to participate in the research because you are a police officer who has taken part in the hot spot policing pilot project by the Evidence Based Policing Centre (evidence-based policingC). You have been contacted because the evidence-based policingC has identified you as an officer who has taken part in this project. This was an inclusion criterion for the study, based on the fact you have had some experience conducting hot spot patrols. How do I agree to participate in this research?

Your participation in this research is voluntary (it is your choice) and whether you choose to participate will neither advantage nor disadvantage you. You can withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible. If you do agree to take part in the study, your responses will be completely anonymous and confidential. If you agree to take part in the study, you will be asked to complete the Consent Form (please find attached).

What will happen in this research?

You will be invited to take part in an interview to talk about your views on hot spot policing, including the recent hot spot pilot project. The interview will last between 30-45 minutes. If you consent, the interview will be audio-recorded for accuracy purposes. You can decide whether you would like the interview to take place at your police station or any other location you feel comfortable.

What are the discomforts and risks?

The research provides minimal risk to participants. You may experience some discomfort if you are to talk about your concerns with organisational practises. Counselling and other support opportunities are freely available for your use if required.

AUT Student Counselling and Mental Health is able to offer three free sessions of confidential counselling support for adult participants in an AUT research project. These sessions are only available for issues that have arisen directly as a result of participation in the research and are not for other general counselling needs. To access these services, you will need to: drop into our centre at WB203 City Campus, email counselling@aut.ac.nz or call 921 9998.

· let the receptionist know that you are a research participant, and provide the title of my research and my name and contact details as given in this Information Sheet. You can find out more information about AUT counsellors and counselling on https://www.aut.ac.nz/student-life/student-support/counselling-and-mental-health

What are the benefits?

This research will contribute toward a student's thesis research as part of a Masters Qualification. The study will also provide you with an opportunity to provide your perspective on hot spot policing, which may help inform and improve future hot spot policing projects.

How will my privacy be protected?

Your information will be stored within the School of Social Sciences at Auckland University of Technology in a secure archive. Only the researcher will have access to the digital recording of the audio, which will be destroyed once the study has been completed. Any personal information you provide that will be obtained as part of this study will be completely confidential, with psudenoyms used in place of any identifying information. In accordance with Auckland University of Technology guidelines, data relating to the findings will be stored for six years after the research. Any hard copy material will be shredded and destroyed after six years, according to Auckland University of Technology research policy.

What are the costs of participating in this research?

There are no financial costs associated with participation in the study. I will only ask maximum 45 minutes of your time, which includes reading and signing the consent form. Refreshments will be provided.

What opportunity do I have to consider this invitation?

You will have two weeks to consider this invitation. However, it will be greatly appreciated if you could contact the researcher as soon as possible to organise a suitable time and date. Will I receive feedback on the results of this research?

At the beginning of the interview, you can request to receive a summary of the findings before publication. You can indicate so through ticking the appropriate box on the consent form. You will receive a summary of the findings by May 2022.

What do I do if I have concerns about this research? Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, *ethics@aut.ac.nz*, (+649) 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Name: Chloe Usherwood,

Email: chloeusherwood@outlook.com

Project Supervisor Contact Details:

Any concerns regarding the nature of this project should be notified in the first instance to the

Project Supervisor: Name: John Buttle,

Email: John.Buttle@aut.ac.nz

Approved by the Auckland University of Technology Ethics Committee on 13/05/2021, AUTEC Reference number 20/414.

Appendix E: Recruitment email (Interview)

Invitation to participate in an interview-based research study.

Kia ora,

My name is Chloe Usherwood. I invite you to participate in an interview-based research study entitled: Hot Spots Policing in New Zealand: A mixed methods study on police officers' perspectives

I am currently in the process of writing my Master's Thesis as part of the Criminology and Criminal Justice program at Auckland University of Technology. I am also a current non-sworn employee of the New Zealand Police, working within the Community Partnerships and Prevention team for Police National Headquarters.

The research question for the study is: What are the attitudes of police officers' toward doing hot spots patrols in New Zealand? Hot spots patrolling is to add visible police patrols, whether by vehicle or on foot, in areas where crime is most expected (i.e., hot spot locations). It is commonly referred to as directed patrolling (3M) in New Zealand.

The purpose of this study is to examine police officers' knowledge and views regarding the use of hot spots patrols as a crime prevention strategy. In order to help improve policing strategies, it is crucial that front-line officers have a voice and can actively participate in the dialogue around adopting these policing strategies.

Participation in the study involves a 30 to 45 minute interview with the researcher to discuss your experiences doing hot spot patrols, including your views on the recent hot spots pilot project and foot patrolling. There are no right or wrong answers to this- we are keen to gain a wide variety of opinions.

Participation in this study is completely voluntary and confidential. You may withdraw from the study at any time or refuse to answer any questions you do not wish to answer.

Before you decide whether or not you would like to discuss your views, it is important for you to understand why the study is important and what it would involve for you if you decide to participate. Please take time to read the enclosed information sheet for more information about the research.

If you are interested in participating, or have any questions or concerns, please contact Chloe Usherwood at chloeusherwood@outlook.com.

This project has been approved by the Auckland University of Technology. Reference 20/414.



Consent Form

Project title: Hot Spots Policing in New Zealand: A mixed methods study on police officers' perspectives
Project Supervisor: Dr. John Buttle
Researcher: Chloe Usherwood
I have read and understood the information provided about this research project in the Information Sheet dated 01/05/2021
O I have had an opportunity to ask questions and to have them answered.
O I understand that notes will be taken during the interviews and that they will also be audio-tape and transcribed.
I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used However, once the findings have been produced, removal of my data may not be possible.
O I agree to take part in this research.
O I wish to receive a summary of the research findings (please tick one): YesO NoO
Participant's signature:
Participant's name:

Date:

Participant's Contact Details (if appropriate):

Approved by the Auckland University of Technology Ethics Committee on 13/05/2021 AUTEC Reference number 20/414.

Semi-Structured Interview Guide

Objective:

Exploring the attitudes of police officers toward doing hot spots patrols in New Zealand

Focus: Knowledge toward hot spots policing

- 1. How would you define in your own words "hot spots policing"?
- 2. Were you familiar with hot spot patrols before the Evidence Based Policing Pilot project?

Focus: Attitudes toward hot spot policing

- 3. What is your opinion on the use of hot spot patrols as a policing strategy?
- 4. Would you say that hot spot policing has any impact on:
 - a) Crime and disorder rates?
 - b) The relationship between police and the community?
- 5. In your opinion, how has the hot spots patrols been received by other police officers?
- 6. Do you believe the patrols were adequately implemented? If not, which problems of implementation can you think of?
- 7. How do you believe the community received the patrols?
- 8. Did you face any challenges/barriers when doing the patrols? If so, what were they?
- 9. What are your views on using foot patrols as a method of hot spot policing?

Focus: Future Interventions

10. According to your experience, how would you improve the delivery of hot spot patrols?

Conclusion

Do you have any additional comments about hot spots policing in New Zealand?

Appendix H: Ethical approval

13 May 2021

John Buttle Faculty of Culture and Society

Re Ethics Application: 20/414 Police officer receptivity to hot spot policing: A mixed methods study

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 13 May 2024.

Non-Standard Conditions of Approval

- 1. Amendment of the survey Information Sheet as follows:
 - a. Replace the paragraph that begins 'your participation in this research is voluntary' with the following: 'Your consent is implicit in the completion of the survey. You can withdraw from the survey at any point until your responses have been submitted; that once this has occurred, however, your data cannot be identified or withdrawn.';
 - b. Remove the paragraph that begins 'you can request to receive a summary'

Non-standard conditions must be completed before commencing your study. Non-standard conditions do not need to be submitted to or reviewed by AUTEC before commencing your study.

Standard Conditions of Approval

- 1. The research is to be undertaken in accordance with the <u>Auckland University of Technology Code of Conduct for Research</u> and as approved by AUTEC in this application.
- 2. A progress report is due annually on the anniversary of the approval date, using the EA2 form.
- 3. A final report is due at the expiration of the approval period, or, upon completion of project, using the EA3 form.
- 4. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form.
- 5. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
- 6. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.
- 7. It is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard and that all the dates on the documents are updated.

AUTEC grants ethical approval only. You are responsible for obtaining management approval for access for your research from any institution or organisation at which your research is being conducted and you need to meet all ethical, legal, public health, and locality obligations or requirements for the jurisdictions in which the research is being undertaken.

Please quote the application number and title on all future correspondence related to this project. For any enquiries please contact ethics@aut.ac.nz. The forms mentioned above are available online through http://www.aut.ac.nz/research/researchethics

(This is a computer-generated letter for which no signature is required) The AUTEC Secretariat

Auckland University of Technology Ethics Committee