The impact of middle manager divergent activity and stakeholder salience in organisations using formal strategic planning. A case study of England and Wales police forces.

A thesis submitted in partial fulfilment for the degree of Doctor of Business Administration

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Declaration

I confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.

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Signed: ……

Abstract

This study examines the antecedents and outcomes of middle manager divergent activity in organisations which use formal strategic planning processes. Through this, it adds to understanding about the strategic role of managers in the middle of organisations and the way in which strategy development processes influence organisations.

The contribution of middle managers to the success of organisations is well established, but the nature of this contribution remains unclear. Middle managers are no longer seen merely as implementers, or sometimes blockers, they are now proposed to be drivers of organisational strategy. Despite this change of view, the way in which middle managers might drive strategy and the reasons why they engage in strategic activity is not fully understood.

Previous studies identify a link between middle manager strategic activity and organisation performance and suggest this may be through improving the information and ideas considered by top management. Middle managers occupy a unique position to do this. They are close to operational activity while also having contact with executive managers. This gives them insight into strategic issues which makes their divergent activity particularly valuable for organisations looking for new strategies.

The positive link between formal strategic planning and organisation performance is established but remains elusive in some studies. This leads researchers to argue that the link is not direct. Understanding how strategic planning processes impact on the views and activities of middle managers is important in fully understanding the value of the process to the organisation. Doing this however, requires a researcher to open up the black-box of strategic planning and understand what is happening behind the façade of the planning process.

This study brings these questions together and examines how the divergent activity of middle managers is influenced by internal and external factors in English and Welsh police forces. It uses a six-dimensional model of strategy development and a model of stakeholder salience to examine how these affect middle managers' divergent activity. It also examines how a manager's perception of their own strategic influence mediates this link. This adds to knowledge about how strategy development processes and external stakeholders impact on middle manager activity.

Police force strategic management is very little researched compared to the operational work of policing, despite it representing a rich area for study. Significant changes in the regulation and management of police forces in the past 20 years, combined with the financial challenges facing all UK public sector agencies, means that new ways of policing are being explored. The research uses a case study approach involving 18 police forces. Data is drawn from middle managers predominantly using a large on-line survey complemented by semi-structured interviews with a small sample of the participants.

Police forces have had experience of using formal strategic planning processes for 20 years. For most of this time the publication of strategic plans has been a statutory requirement. This makes the existence of strategic plans and objectives an unreliable indicator of formality and rationality in the development of police force strategies. This study looks behind the production of strategic plans to consider in more detail how strategy development affects the involvement of middle managers.

The study finds that the rigid rank hierarchy of police forces significantly affects the way that middle managers see their strategic role. The managers studied split into two separate groups defined by rank. The level of divergent activity in both groups is associated with the perception of their personal influence. This perception of influence also mediates the link between strategy development processes and divergent activity.

The study does not find evidence that middle manager divergent activity is associated with organisation performance. Despite the formulation of strategic plans, rational working is perceived as limited and this may constrain the link between the middle managers' activity and strategic decisions.

The integrated model of strategy development profile used in the study does not properly capture the dimensions of strategy which are important for police managers. The study adapts the original model to define five dimensions highlighting the importance of developing strategy in partnership and the impact of the misuse of power. Working in partnership, and the salience of external stakeholders with whom police managers can engage, increases the perception of influence over strategy.

These findings add to understanding of the antecedents of middle manager divergent activity and the way that strategy development processes impact on middle managers. They offer insight for police forces wanting to increase the level of managers' divergent activity.

Acknowledgements

Doctoral research is largely an individual pursuit but even the most solitary researcher relies on a wide range of people during the course of their study.

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Glossary of terms and abbreviations

ACC	Assistant chief constable. Senior police officer in police force management team
BCU	Basic Command Unit. A term used by some police forces to describe a geographical policing unit comprising one or more police stations.
CPA	Comprehensive Service Assessment – a measure of local authority performance developed by the Audit Commission which uses weighted indicators to arrive at a single measure of overall performance
CRP	Crime Reduction Partnerships – statutory structures through which local police officers work in partnership with other public agencies to deal with local problems
ESS	External stakeholder salience. A measure of how important stakeholders external to the organisation are perceived by managers
HMIC	Her Majesty's Inspectorate of Constabulary. A unit reporting to the Home Secretary responsible for the inspection of effectiveness and efficiency of policing
HR	Human Resources
MMDA	Middle manager divergent activity. A study construct concerning the extent to which middle managers engage in activity which challenges the current strategy and develops new ideas
MSF	Most Similar Forces. Groups of forces defined by the HMIC for the purpose of comparing performance
NFP	Not-for-profit - an overall expression for organisations such as charities and those in the public sector
OM	Operational managers – a level of managers in police forces defined for this study comprising police inspectors and police staff with similar level of responsibility
OP	Organisation performance
OPM	Organisation for Public Management
PC	Police constable. The most junior police officer rank
PCC	Police and Crime Commissioner – an elected individual
PCC forces	The 41 police forces in England and Wales under the direction of a PCC
Police officer	A sworn officer of the law who has statutory powers to arrest and detain people
Police staff	Employees of police forces who are not sworn and have no extra powers beyond any member of the community
PSAEW	The Police Superintendents Association for England and Wales. The staff association for police superintendents
SDP	Strategy development profile. A study construct relating to the way that strategy is decided in an organisation
SOM	Senior operational managers – a level of managers defined for this study comprising police chief inspectors and superintendents, and police staff with a similar level of responsibility

Chapter 1 Introduction

This chapter sets out the purpose, aims and scope of the research. It details the issues and concepts addressed and outlines the contribution the study makes to management theory and practice. It concludes with a description of the structure of the thesis.

1.1 Managers and strategy development

The influence of organisational strategy on performance is well established (for example Miles et al., 1978; Andrews et al., 2006). Despite this, two important areas remain unclear for organisations looking for new, innovative and effective strategies. First, how strategies develop in organisations is not yet fully researched. Rudd et al. (2008) suggest that there is little consensus about how strategy-making takes place. Second, the way that different strategy development processes link to organisational outcomes is not yet fully explained.

This study adds to both of these areas by looking closely at the activities of managers in developing organisational strategies. Managers make a difference to the performance of organisations (Andrews et al., 2006). Mollick (2012) finds that managers have greater impact than other organisational factors on organisation performance. The extent to which this can be explained through their involvement in strategy development processes is the focus of the research.

How managers throughout the organisation influence, and are influenced by, the strategy development process will affect the strategies chosen (Bowd, 2003). However, research into how strategy develops has not focused on the actions and perceptions of managers. It tends to see strategy as resulting from one-off decisions, focusing on the more formal structures and systems (Jarzabkowski and Whittington, 2008). This can result in less attention on the more complex social and political processes. Johnson et al. (2007) summarise the criticisms by suggesting that researchers into strategy traditionally,

> *"…tend to assume what people do, attributing behaviour on the basis of observed outputs and deducing from these the actual activity; or they raise 'doing' to a level of abstract categorisation, such as planning…"* (p. 3*)*

Most of the research looking at the impact of managers on strategy development focuses on top managers and the upper echelon perspective of Hambrick and Mason (1984). From this perspective managers in the middle of the organisation are seen as implementers, or sometimes blockers of new strategy (Guth and MacMillan, 1986). More recent studies however take a middle management perspective which recognises middle managers as actors in the development of strategy (Burgess and Currie, 2013). This results in Mantere (2008) arguing that middle managers can be the drivers of organisational strategy. This aspect of middle manager activity is not fully studied. Wooldridge et al. (2008) and Shi et al. (2009) call for more study of middle managers in the strategy process.

This study builds on this earlier work by using a processual perspective of strategy (Whittington, 2002) development in organisations which encompasses both deliberate and emergent approaches (Mintzberg and Waters, 1985). This perspective sees strategy developing through a pragmatic process of learning, adaptation and compromise influenced by social, cultural and political factors. Using this lens, the research looks at the involvement of middle managers in strategy development in organisations where formal strategic planning is well established. It looks behind the apparent rationality, evidenced by the development and publication of strategic plans, to identify formal and informal strategy development processes at work. It then considers how these processes influence middle managers' willingness and ability to undertake activities necessary for the development of new and innovative strategic ideas. This study extends understanding of the strategic processes in organisations and how middle managers influence the effectiveness of those processes.

1.2 Strategic activity of middle managers

The middle manager perspective opens up a wider strategic role for managers throughout the organisation in developing new ideas. Grant (2003) argues that formal planning processes need to sit alongside more autonomous management activity in order to be most effective. The effectiveness of formal strategic planning is therefore connected to the actions of middle

managers encompassing both formulation and implementation. This view is supported by Andersen (2004) who concludes that strategic planning and autonomous activity by managers are complementary. Both combine together to give higher performance. Understanding the mechanism through which the approaches interact is important for organisations using strategic planning processes.

The importance of middle managers in strategy development is particularly recognised by writers such as Raes et al. (2011) who propose that they have a double role. Wooldridge et al. (2008) sum this up as,

> *"What makes middle managers unique is their access to top management coupled with their knowledge of operations…"* (p. 1192)

The importance of middle manager strategic activity is well documented, but the level of activity varies significantly by context. Currie (1999) finds limited strategic activity of middle managers in a case study of a UK NHS Trust. O'Brien and Sharkey Scott (2009) similarly find little evidence of strategic development by middle managers in a subsidiary of a multi-national corporation. In a large survey across a range of organisations in the USA, Schilit and Paine (1987) find that middle managers in large public sector organisations are less likely to engage in strategic activity than their private sector counterparts. The reasons for this are largely unexplored and Pappas and Wooldridge (2007) comment, *"explanations for how and why some managers participate in strategic activity more than others are less than clear."* (p. 323). Examining the antecedents of these strategic activities requires a clear view of what those activities are (Floyd and Wooldridge, 1992).

1.2.1 Divergent activity

Floyd and Wooldridge (1992) categorise the activity of middle managers into integrative and divergent. Integrative activity describes the traditional activities of managers in relation to the implementation and support of the current strategy of the organisation. Divergent activity relates to actions resulting in new *"ideas that, if acted upon, alter the organization's concept of strategy."* (Floyd and Wooldridge, 1992 p.154) These activities can be either championing new ideas or approaches to top management, or facilitating new ways of working and thinking in more junior staff.

Wooldridge and Floyd (1999) look at strategising in organisations and recognise the requirement for middle managers to engage in both integrative and divergent activity. They see this resulting in a tension.

> *"On the one hand it requires establishing a dominant logic that guides and constrains activities within the firm. At the same time, however, strategists are obligated to destroy the dominant logic, to break from it, to create new strategies."* (p. 1)

A dominant logic can be important in giving cohesion and direction to an organisation but can also be a sign of a strong culture constraining strategy development through strategic myopia (Lorsch, 1986). Building on this, Johnson et al. (2014) argue that a tradition of challenge in organisations is important for sustained strategic success. Floyd and Lane (2000) conclude that middle managers have a particularly valuable role in challenging because,

> *"…they have more knowledge of the firm's strategic situation than operating managers, as well as more familiarity with operational matters* […] *than top managers."*

This means,

> *"Middle managers are able to evaluate new information in the context of the firm's strategic operations and markets and thereby direct top managers' attention to an understanding of the strategic issues…"* (Floyd and Lane, 2000 p. 159)

There is strong support for the idea that creation of new strategies is assisted by middle manager divergent activity taking place to question the dominant logic (Burgelman, 1983; Wooldridge and Floyd, 1990). Despite this, the level of middle manager divergent activity varies considerably between organisations. How and why managers engage in divergent activity is important in fully understanding the strategic processes taking place, and the contribution of middle managers. This is supported by Shepherd and Rudd (2014) who argue that strategic management research should take more account of context. Understanding the strategic activity of middle managers requires study of the external and internal influences on it.

1.3 Stakeholder salience

An organisation's view of its stakeholders can influence the approach to strategy development (Greenley et al., 2004). However, the way that stakeholders influence the activity of individual middle managers is unclear. Currie and Proctor (2005) find that powerful external stakeholders can constrain middle managers' willingness to engage in divergent activity. This supports the ideas of Rizzo (1970) that engagement with multiple external stakeholders can result in role conflict for managers. Challenging this, Kuratko et al. (2007) find that managers can gain entrepreneurial opportunities from engaging with external stakeholders.

Mitchell et al. (1997) model of stakeholder salience allows consideration of the influence of stakeholders in the perception of managers based on the extent to which their claims are seen to be backed by power and have legitimacy and urgency. The demands of external stakeholders are an important factor in the context of public sector organisations which form the focus of this study. How the perception of salience impacts on the divergent activity of middle managers is not yet studied.

1.4 Strategy development

Formal strategic planning processes are used by the majority of large organisations as their primary strategic development tool (Whittington and Cailluet, 2008). However, there is continuing debate about the purpose of planning and how it assists the management of the organisation.

Research exploring the effect of strategic planning has a long history. However, in a review of strategy process research, Hutzschenreuter and Kleindienst conclude that ideas about *"strategic planning – in theory as well as in practice"* (2006 p.700) have changed. They argue that strategic planning is no longer viewed as the source of strategies, but as part of a more complex process involving the interaction of organisational actors. This leads researchers such as Andrews et al. (2009) to conclude that some studies of the influence of formal strategic planning do not take account of the complexities involved. The authors suggest the need for a more "nuanced" view of strategy formulation (Andrews et al., 2009 p. 13). Full understanding of the influence of strategic planning processes on organisational actors requires researchers to open the black-box of strategic planning and look in more detail at how strategies actually develop in an organisation.

1.4.1 Integrated models of strategy development

This call for a more fine-grained model of strategy development is supported by Brews and Hunt (1999) who see a lack of definition of the strategic planning construct as one factor leading to inconsistent results in older studies.

Studies of strategy development in organisations (for example Hart, 1992) recognise that it needs a multi-dimensional view, except in the simplest organisations. The actual strategy development process can only be fully understood through considering the amalgamation and interaction of several dimensions. Even where a formal strategic planning process is established in an organisation, it is necessary to consider it alongside the other formal and informal processes taking place. Identifying the different dimensions allows a more comprehensive model of strategy development. The six-dimension model of Bailey et al. (2000) recognises strategy can be formed by different types of management action (*command*, *planning*, *incremental*), organisational factors (*culture*, *politics*) and factors outside the control of the organisation (*enforced choice*). Understanding the individual and combined influence of these dimensions on managers and organisations is important for assessing how strategy development processes influence middle managers.

1.5 English and Welsh police forces

The context of this research is police forces in England and Wales where management practices (including strategic planning) are well embedded, but their effectiveness in influencing performance is questioned. In a review of strategic management tools in the public sector, Williams and Lewis suggest, *"… it remains questionable whether private sector models are easily implanted or indeed helpful in public management practice." (2008 p. 654)*

In the past 30 years, in common with other public sector organisations, police forces in Britain have seen changes commonly referred to as New Public Management (Jones and Newburn, 2002). These have included the introduction of devolved management structures and an increased focus on measuring performance against published objectives. Following the introduction of Management by Objectives principles (Lubans and Edgar, 1979) in the 1980s, some forces also started to produce longer range organisational plans. These were designed to give cohesion and consistency to annual plans and orientation and animation to the force. In

1998 the government formalised this, requiring police forces to publish 3-year 'strategy plans'. Despite this experience, doubt has been expressed over the effectiveness of strategic planning in police forces.

Work by the Police Foundation (Irving, 2000) looking at English and Welsh forces, questions the effectiveness of strategic planning approaches in use. It concludes,

> *"Strategies that are claimed to be in place by senior management have virtually no impact on traditional working practices at street level* […] *largely because the strategies are not delivered to the* [operational units] *with the tools and techniques to achieve implementation."* (p.1)

Since Irving's study, there is no work looking generally at strategic management in the police service. However, in the experience of the researcher, many police leaders still see strategic planning as a ritual with little relevance to the 'unique' context in which policing operates. Police managers are not alone in questioning the effectiveness of strategic planning (See for example Kaplan and Beinhocker, 2003), but there is very little empirical research into how strategic planning processes affect the working of police forces. This study partly fills that gap by examining the way that the processes at work influence the perceptions and activities of middle managers.

Policing works in a complex environment with a large number of stakeholders and a direct impact from local and national politics. It is not possible to separate the actions and motivations of managers within police forces from this context. The research uses a case study approach in order to explore the questions outlined above within the particular context of the organisation studied. This is considered further in chapter 3.

1.6 Contribution of the research

This study contributes to the strategy as practice perspective in looking at the three aspects of the strategy development process identified by Whittington (2006). These are *practitioners*, *practices* and *praxis*. The study looks at a particular group of *practitioners* in their context. It considers the formal *practices* of the strategic planning established in the organisation and also the influences on, and impact of, the *praxis* they undertake. In this way the study adds to

knowledge about middle manager strategic activity in organisations which have previously been little studied. The contribution is in four areas.

First, it adds to the work on the link between middle manager strategic activity and organisational outcomes in testing how divergent activity links to organisational performance.

Second, it adds to existing theory on the organisational antecedents of middle manager divergent activity by examining how it is influenced by strategic development processes in practice. Additionally, it applies the model of Floyd and Wooldridge (1992) in the new context of a public sector organisation, testing the applicability of the model.

Third, it adds to knowledge on the influence of stakeholders on organisations, examining the extent to which external stakeholders affect the level of middle management divergent activity.

Fourth, it adds to the work on the effectiveness of strategic development in organisations through examining the degree to which strategic development approaches, as described by the dimensions identified by Bailey et al. (2000), facilitate divergent activity of middle managers.

Practically, the study assists the work of managers in the police service by testing important management concepts in a context which has been little studied. First, it contributes to a clearer understanding about the way that strategy develops in police forces. Second, it aids the development of more effective links between managers and external stakeholders. Third, it helps understanding of the skills and capabilities needed by middle managers when involved in strategic planning.

British police service managers are currently dealing with two major issues. They are consolidating the changes which have resulted from New Public Management policies with the associated increase in co-operation with other stakeholders and the expectations of communities. Also, as a result of the financial downturn, they are facing serious resource constraints. This study should help managers deal with both of these challenges which hinge on effective strategic management.

The study answers the call of Shi et al. (2009) and Wooldridge et al. (2008) for a better understanding of the strategic activity of middle managers. It also follows Shepherd and Rudd's (2014) suggestion for strategy development to be considered in a particular context. Lastly, it

meets Andrews et al's. (2009) call for application of a more nuanced model of strategy development.

1.7 Overview of thesis

The overall structure of the thesis is summarised in Figure 1.

Chapter 2 discusses the current literature and sets out the constructs which underpin the study. The chapter shows how the internal and external antecedents of middle manager strategic activity remain unclear. It also details how an understanding of strategic development in organisations results from the use of multi-dimensional models whose impact is only partly explored. It concludes by defining the research questions, the conceptual model, and the hypotheses tested.

Chapter 3 discusses the research methodology guiding the study. It explores how the researcher's philosophical stance, as well as the requirements of the research questions, influences the approach taken. It justifies the adoption of a case study method predominantly using quantitative data from a large sample supplemented by semi-structured interviews. Finally, it describes the approach to pre-testing and piloting of data collection methods.

Chapter 4 explains the context of the research in the police forces included in the study. It shows how the particular experience and structure of the police service is a useful focus for extending thinking in this area.

Chapter 5 discusses the initial review of the data collected to assess whether the sample of managers included can be treated as a single homogenous group of middle managers. It then describes the analysis and discusses the findings in relation to the variables which form the focus of the study and the results of testing the research model. It sets out the extent to which the hypotheses are supported.

Chapter 6 sets out the conclusions from the analysis of the data from the survey and interviews. It discusses the contributions of the study to theory about middle managers and strategy development, and the practical contribution to management in police forces. It then considers limitations of the study, suggesting areas where further research might be focused. Finally, it

sets out some personal reflections on the research process and the researcher's personal learning.

Chapter 1
Introduction to the research and its focus and implications. The researcher's personal motivation for choosing the study.
Chapter 2
A review of the current literature relating to the research. The research questions, conceptual model and hypotheses.
Chapter 3
The philosophy and key issues underpinning the approach taken for the research. Details of the research process and survey instruments used and approach to pretesting and piloting.
Chapter 4
The context in which the research take place. Description of the background and strategic processes in police forces.
Chapter 5
The findings from the study. Assessment of the extent to which the study sample represents a homogenous group. Assessment of the quantitative and qualitative data measuring support for the hypotheses.
Chapter 6
The conclusions from the data analysis. The contribution of the research to theory and practice. The limitations of the study and areas for further work. Personal reflections of the researcher.

Figure 1 – Structure of the thesis

1.8 Summary

This chapter sets out the purpose of this research and describes the key theoretical areas that are involved. It explains the context in which work takes place and the contribution to theory and practice which the findings offer. The next chapter considers the existing theory relevant to the study and develops the conceptual model which guides the research.

Chapter 2 Literature review

This chapter reviews the current literature on which the study is built. It considers the areas of research which this study brings together and then describes a conceptual model for examining the relationships between these three areas and organisation performance. Section 2.1 explains the areas of theory included in the research. Section 2.2 then discusses the perspective of strategy on which the study is based. Sections 2.3 to 2.6 then detail the literature relevant to middle manager strategic activity, strategy development in organisations, external stakeholder salience and organisation performance. Section 2.7 completes the chapter by setting out the research questions guiding the study, a conceptual framework, and the hypotheses flowing from it.

2.1 Areas of study

This study brings together three separate areas of business research and considers them within a particular context (Figure 2). Each of these areas is individually the subject of extensive research, but the impact each has on organisation performance remains unclear and the importance of context is not yet fully explored.

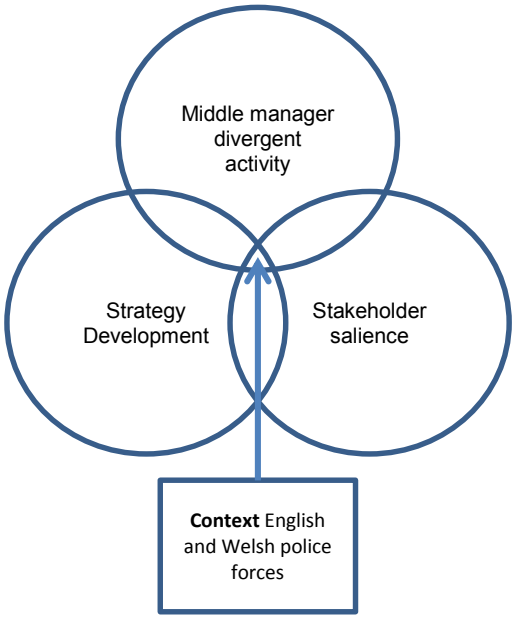


Figure 2 – Areas of research

Studies in the past 20 years also reveal complex interactions between these areas. However, understanding the complexity of their interaction requires a more fine-grained approach than has previously been taken.

2.1.1 Middle manager divergent activity

The first area is the engagement of middle managers in divergent activity. Studies of the strategic role of middle managers have grown to complement the focus of the upper echelon perspective (Hambrick and Mason, 1984) which focuses on top management. Divergent activity challenges current thinking in an organisation and is related to the development of new organisational strategies (Wooldridge and Floyd, 1999). The importance of divergent thinking in any organisation lies in the way it challenges the dominant logic which leads managers to focus on some information to develop strategies, while ignoring other information (Bettis and Prahalad, 1995). This sort of entrepreneurial and autonomous activity inside organisations is linked to increased organisation performance (Andersen, 2000; Balabanis and Spyropoulou, 2007). A number of studies argue that managers in the middle of organisations are in a unique position to influence strategy through divergent activity (for example Burgelman, 1983; Floyd and Lane, 2000). However, middle managers may choose not to engage in this way, particularly in public sector organisations (Schilit, 1987) for reasons that are not yet researched. While some of the antecedents of middle manager divergent activity are understood (Wooldridge et al., 2008), the influence of strategy development processes on middle managers is unclear.

2.1.2 Stakeholder salience

The second area relates to the influence of stakeholders on managers and organisational strategic processes. At an organisational level, external stakeholders can impact on the way strategy develops in organisations (Greenley et al., 2004). Powerful external stakeholders can also influence individual middle managers' willingness to engage in divergent activity both negatively (Currie and Procter, 2005) and positively (Kuratko et al., 2007). However, the degree to which this influence can be affected by the way that strategy develops is not yet studied.

2.1.3 Strategy development

The third area covers how strategies form in organisations and shows that strategy develops through the interaction of deliberate and emergent processes (Mintzberg and Waters, 1985; Andersen, 2000). This means that strategy development requires a multi-dimensional view to fully describe it (see Balabanis and Spyropoulou, 2007). Studies identify a relationship between

these processes and organisation performance (Bailey et al., 2000). However, despite 40 years of research, findings about the organisational impact of strategy development processes remain inconsistent. Recent work suggests two reasons for this. First, models of strategy development do not take into account the nuances of the construct (Andrews et al., 2009). Second, the relationship between strategy development and organisation performance is mediated by other organisational factors (Rudd et al., 2008; Ouakouak and Ouedraogo, 2014). This study uses a model of strategy development which will explore the divergent activity of middle managers as a mediator.

Combining the three areas outlined in this section allows a more comprehensive understanding of how strategy development processes and the salience of external stakeholders influences the divergent activity of middle managers and contributes to organisation performance.

2.2 Strategy perspectives

Before considering the specific literature pertinent to this thesis, it is necessary to set out the underlying principles of strategy which are its foundation. This section explains how this study builds on a processual perspective (Whittington, 2002), focusing on factors influencing the activities of managers and other stakeholders involved in the development and implementation of strategy.

2.2.1.1 Organisation strategy

The desire to explain differences between the performance of organisations and identify the sources of success is central to ideas of strategy (Rumelt et al., 1994). Despite research for more than half a century, there is no consensus about what strategy is or how it is formed. Mintzberg (1996) suggests that there is no single answer and argues for an eclectic approach. He offers five separate, but not independent, definitions; strategy can be a plan, a ploy, a position, a perspective or a pattern.

To help explain the variety of theories of strategy, Whittington (2002) proposes that they are based on different assumptions about the ability of people to think rationally and act effectively. He defines four perspectives which he terms classical, evolutionary, processual, and systemic. These can be shown on a matrix where the two axes are continua (Figure 3). The horizontal axis shows the process through which strategies form. This varies between one extreme where the

strategies are the result of deliberate intention, to the other where strategy emerges in an organisation without intention. The vertical axis shows the outcome of strategy-making. This ranges from a single focus on maximising profit to a pluralistic view allowing a range of outcomes.

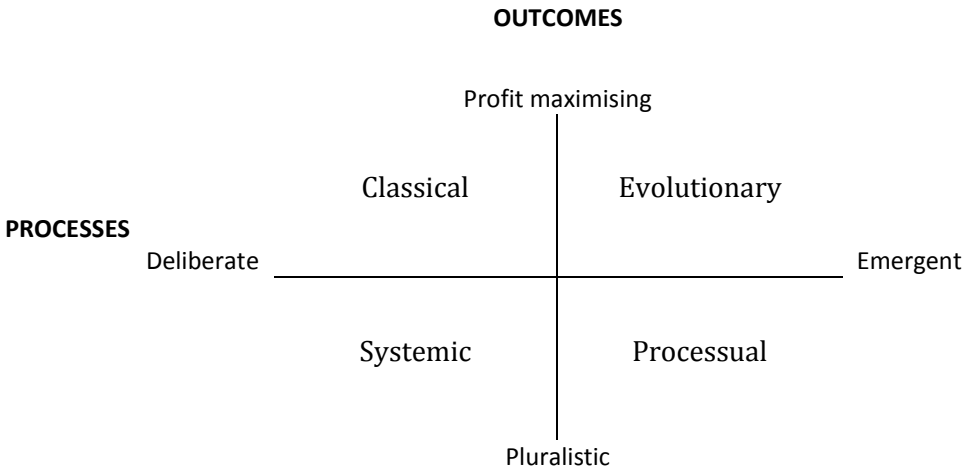


Figure 3 – Perspectives of strategy (Whittingon, 2002)

The **Classical perspective** is based on assumptions about deliberate calculation and analysis and a focus on profit. If a manager can gather the information and apply the right techniques, the organisation and the world can be managed. This perspective leads to principles about strategic planning, and strategic leaders making decisions which are subsequently implemented.

The **Evolutionary perspective** is also based in the belief about the importance of the focus on profit, but maintains that the unpredictability and implacability of the external environment can make future planning irrelevant. Long term survival cannot be planned for. Only firms that hit on the right strategies will survive. Markets, not managers choose the successful strategies. All managers can do is ensure that they fit with the environmental conditions of the day.

The **Processual perspective** is equally pessimistic about the ability of managers to guide their organisations but sees this as due more to weaknesses within rather than uncontrollable external factors. People (managers and customers) are too different in their interests, limited in their understanding, and changeable in their views to be rational and economically calculating. From the Processual perspective, strategy emerges through a pragmatic process of learning, adaptation and compromise influenced by social, cultural and political factors.

However, this also means that markets are not perfect at weeding out the least effective companies and success comes for a complex mix of reasons.

The **Systemic perspective** returns to the belief that managers are able to influence their organisations, but highlights the social context within which the firm operates. From this perspective, the practices of strategy depend on the social system. Managers might not follow profit maximising approaches because they make little sense when put alongside factors such as professional pride, national patriotism or managerial power.

Each of the perspectives offers a lens through which to understand the operation of strategy in organisations. However, the processual perspective particularly focuses on the actions of managers and other stakeholders. This view offers rich opportunities to study organisations and examine what is happening as strategy is developed and implemented.

2.2.1.2 The processual perspective

Ideas about how strategy develops have moved from it being seen as the result of rational choices of top management (for examples see Ansoff, 1965) to it resulting from more complex and informal processes inside organisations (Ezzamel and Willmott, 2007). This processual school of strategy grows largely from the work of Mintzberg (1994). He questions the traditional approaches of strategic planning, and the theoretical separation of strategy formulation and implementation, and argues that strategy emerges in organisations (Mintzberg and Waters, 1985).

The view that strategy can be emergent has three implications. First, it opens up strategy-making to be part of the activity of practitioners at all levels of the organisation. Second, it highlights the actions of managers allowing examination of the motivations and constraints around those actions, including psychological constrains such as bounded rationality (Simon, 1963). Third, it includes consideration of issues characterised by Pettigrew as *"political/cultural considerations"* (1985 p. 46). This leads to the idea of strategy development as, *"…a matter of social learning, that is, managers and others in the organisation learning how to adapt to a changing environment". (Wooldridge et al., 2008 p. 1193)*

The processual view emphasises the realities for individuals working in organisations. Exposing the constraints and limitations which can influence strategic actors allows a more comprehensive representation of organisational activity. This enables the strategy researcher

to look behind the formal roles and processes established in the organisation and expose more of the motivations and influences on all of those involved.

Having discussed the ideas of strategic management which form the basis of this study, the following sections review the literature for the three areas of the study. Section 2.3 considers middle manager divergent activity. Section 2.4 looks stakeholder salience and section 2.5, strategy development.

2.3 Middle manager divergent activity

This section considers the activities of middle managers in strategy development in organisations. It reviews how the idea of the middle manager as a linking-pin (Likert, 1961) between the operational and executive levels in an organisation suggests that they are able to play an important part in development as well as implementation of organisation strategy.

The value of managers in organisations has been questioned in the last 30 years and writers (for example Osterman, 2009) comment about how the number of managers has been reduced. In the UK public sector 'management' has at times been seen as a derogatory term when successive government spokespeople equate 'managers' with 'bureaucrats'. Despite this implied view of managers as an overhead, recent research has supported the value managers bring to organisations. In a study of the computer game industry, Mollick (2012) finds that individuals have more impact on performance than other organisational factors. Further, he concludes, *"it is the individuals who fill the role of middle managers – the 'suits' rather than the creative innovators that best explain variation in firm performance."* (p. 1013)

Mollick's findings build on the work of Burgelman (1983) who argues that middle managers can use a unique position to play a key role in selecting new strategies. Other work supports the idea of the involvement of middle managers in strategic activity. A number of studies examining middle manager strategic activity in dynamic environments (for example Wooldridge and Floyd, 1990; Floyd and Wooldridge, 1992) find a relationship between the involvement of middle managers in developing strategy and organisation performance. However, why middle managers choose to engage in this activity is not fully understood (Wooldridge et al., 2008). In particular, the relationship between strategy development processes and middle manager

strategic activity remains obscure with Bowd concluding that any connection is *"complex and inter-related"* (2003 p. 208).

2.3.1 The middle manager perspective

The processual view of strategy development sees strategy as emerging in organisations through a pragmatic process of learning, adaptation and compromise influenced by social, cultural and political factors. This view therefore proposes strategy formation as a widely dispersed process. This challenges the traditional upper echelon perspective (Hambrick and Mason, 1984) which focuses on the role of executive managers as strategic leaders, and sees middle managers purely as implementers. In contrast, the middle manager perspective builds on ideas of earlier writers such as Bower (1970) and Kanter (1982) who suggest that middle managers have a unique position as the mediators between the strategic level of the organisation and day to day working. This means that they are best placed to understand issues, recognise problems and play an important role in developing strategy.

Floyd and Lane (2000) support the importance of middle managers and sum up why this position in the organisation is unique.

> *"This level of management fulfils the broadest range of strategic roles. In order to interact with operating management, middle managers must maintain a degree of technical competence and a detailed understanding of the organisation's capabilities. To interact with top management, they must also understand the organisation's goals and competitive strategy as well as the political context in which these are developed."* (p. 164)

2.3.2 Middle managers and organisation performance

In the first empirical study in this area Wooldridge and Floyd (1990) examine the association between middle manager involvement in the strategy process, their understanding of and commitment to the strategy, and organisation performance. The research uses a sample of 196 middle managers in 20 US banks and manufacturing companies working in dynamic and competitive environments. The authors measure involvement on the basis of engagement in five activities. These are:

- identifying problems and proposing objectives;
- generating options;

- evaluating options;
- developing detail about options; and
- taking necessary action to put changes in place.

The study reports a complex association. Wooldridge and Floyd do not find any significant association between *taking necessary action to put changes in place* and any of the measures of understanding, commitment or organisation performance. The performance measures used are subjective assessments of competitive position, return on assets, and efficiency of operations, overall financial performance, and growth. This questions traditional ideas of middle managers being seen as merely the implementers of new strategies. Conversely, *generating options* significantly correlates (r = .32 - .44) with all the measures of performance used, but is also not related to greater understanding or commitment. This suggests that middle managers possibly have a more creative role in the development of effective strategies. *Identifying problems and proposing objectives*, and *developing details about options* correlate only with return on assets (r = .31 and .34). *Evaluating options* correlates with return on assets, competitive position and overall financial performance (r = .31 - .38).

Wooldridge and Floyd (1990) conclude that the involvement of middle managers in the strategy development process contributes to greater understanding of the strategies but not to greater commitment. Additionally, they do not find that improved understanding leads to improved effectiveness of implementation. They suggest the benefit in performance may be because of middle manager involvement leading to better decisions, although they accept that this conclusion is "*problematic*" (p. 238) as the quality of decision making is not the focus of the study and is not directly measured.

The results of the study support the view that the involvement of middle managers is a variable which needs to be considered in the strategy development process but that the nature of its influence is under researched. The finding about the association between *generating options* and performance fits with the proposals of Kanter (1982) and others about middle managers having unique knowledge and understanding of strategic issues. However, the mixed results suggest that a more fine-grained measure of involvement is needed to understand fully any association.

Floyd and Wooldridge (1992) further develop four roles for middle manager strategic activity. They model the roles using two dimensions (see Figure 3). The first dimension concerns the

behavioural aspect of the activity. It draws on the principle of the middle manager as a linking-pin between the operational activity and the top management (Likert, 1961). It divides the activity between whether the focus of middle manager activity is directed *upwards* in the organisation, towards the decision making of senior managers, or *downwards* towards the activity of more junior managers and staff for whom they are responsible.

		Behavioural (Direction of influence)	
		Upwards	**Downwards**
Cognitive (Type of influence)	**Divergent**	**Championing alternatives**	**Facilitating adaptability**
	Integrative	**Synthesising information**	**Implementing deliberate strategy**

Figure 4 – Middle manager strategic activities (Floyd and Wooldridge, 1992)

The second dimension concerns cognitive aspects of behaviour. This builds on the work of Burgelman (1983) who proposes that large organisations need a balance between order and diversity to be sustainably successful. He argues that order is achieved through planning processes focusing on the current strategy. Conversely, diversity involves autonomous behaviour of people at lower levels in the organisation. Burgelman argues that new strategies develop through a process of experimentation and selection continually at work in viable organisations. To encompass both order and diversity aspects, the cognitive axis divides middle manager activity into *integrative*, in that it supports the organisation's current view of the strategy being followed, or *divergent*, in that it challenges or changes the current view of that strategy.

Integrative activity describes the more traditional roles of middle managers in *synthesising information* for senior managers' strategic decisions and *implementing the deliberate strategy* chosen by senior managers. Divergent activity describes roles which are more important in developing new and different strategies. This can occur in two ways. First, middle managers can influence the decisions of senior managers by *championing alternative* courses of action. Second, they can influence strategy development by *facilitating adaptability* in their staff and encouraging experimentation with new approaches.

Floyd and Wooldridge (1992) apply this model of middle manager strategic activity in a study of 25 US profit making organisations. Using a sample of 259 middle managers they find that none

of the four categories of activity significantly correlate with a measure of overall financial performance. This does not support their earlier finding (Wooldridge and Floyd, 1990) that *generating options* is associated with financial performance (r = .36). The difference in findings suggests that the outcome of middle manager activity may be contingent on organisational or environmental factors not included in the study.

In a later work, (Floyd and Wooldridge, 1997) further examine the link between activity and a more detailed breakdown of organisation performance. They combine the categories of middle manager activity into two groupings depending on whether it is directed upwards or downwards. They confirm that there is no significant relationship between the level of strategic activity and organisation performance. However, they report a significant correlation between performance and the variation in the level of activity of middle managers. They find a positive correlation between variety in the level of upward-facing activity and measures of competitive position, return on assets, overall financial performance, effectiveness in achieving goals and overall performance (r = .17 - .27). They find a negative correlation between variety in the level of downward activity and measures of competitive position, return on assets and efficiency of operations. A relationship with a measure of growth is not found for either upwards or downwards activity.

Floyd and Wooldridge (1997) conclude that diversity of upward influence and consistency of downward influence are related to organisation performance. This study does not support the direct link between the level of middle manager strategic activity and performance found in the earlier study (Wooldridge and Floyd, 1990).

Bowd (2003) uses Floyd and Wooldridge's model (1992) and the same categories of organisation performance as Floyd and Wooldridge (1997). He finds a composite measure of upward influence (combining *championing alternatives* and *synthesising information*) significantly correlates with all measures of organisation performance (r = .23 - .42). In comparison, a composite measure of downward influence (combining *facilitating adaptability* and *implementing deliberate strategy*) only correlates with measures of goal achievement, operational efficiency and financial performance (r = .24).

There are three possible reasons for the difference between the findings of the studies examining the association between middle manager activity and organisation performance. First, it may be due to a change in the role of middle managers in the decade between the

research. Floyd and Wooldridge (1994) describe how large organisations started to 'de-layer' at the end of the 1980s resulting in a decrease in numbers of middle managers. They argue that this is combined with a change in view in organisations, from middle managers being seen as part of the control systems to them having a more strategic role. The reduction in numbers may also have led to a change in the influence of their activity on organisation performance.

Second, the difference in findings may be due to methodological differences in the way middle manager activity is measured. Floyd and Wooldridge (1992) ask managers about the extent to which they see the different forms of strategic activity as part of their role. In contrast, Bowd (2003) asks managers to report how frequently they performed the different activities. The different studies may therefore reveal a distinction between the measurement of practices that middle managers perceive should be carried out, and the reporting of praxis. For example, a manager may believe that activities to *champion alternatives* are part of his or her role, but know that they do not actually have the time or motivation do it in practice.

Third, it is possible that focusing only on the direction of middle manager activity obscures the impact of the different cognitive aspects parts of Floyd and Wooldridge's model (1992). This may also prevent understanding of how the different strategic activities may be influenced by other organisational or environmental factors. Examining this inter-play will require a more comprehensive consideration of contingent factors.

To further explore the influence of middle manager strategic activity on organisation performance it is necessary to look in more detail at the separate parts of the Floyd and Wooldridge model (Figure 4). Floyd and Wooldridge (1997) and Bowd (2003) focus on the difference between the directions of influence. However, the arguments of Burgelman (1983) and the findings of Wooldridge and Floyd (1990) about the importance of middle managers *generating options* suggests the direction of influence may be less important than the type of influence. It also suggests that the influence of divergent activity may be particularly valuable to organisations and needs to be examined more closely if any association with performance is to be fully understood.

2.3.3 Divergent activity

Divergent activities are those that *"challenge the 'dominant' logic of the firm ... and spark the development of new capabilities"* (Pappas and Wooldridge, 2007 p. 324). Bettis and Prahalad (1995) argue that dominant logic leads managers to focus on certain information and give less

attention to other, thus preserving a status quo. The perceived value of divergent activity in organisations is based on the need for new and different thinking which questions the dominant logic and, if acted upon, alters the organisation's view of strategy. Divergent activity can influence organisations in two ways. Building on Dutton and Ashford (1993), *issue selling* is a critical activity of middle managers in the early stages of strategic decision making. This is because they *"have their hands on the pulse of the organisation and are closer to customers and stakeholders*" (Dutton et al., 1997 p. 407). Thus *championing alternatives* activity (Floyd and Wooldridge, 1992), focused upwards towards top management, is an important way that middle managers contribute to the organisation's strategic direction and increased effectiveness.

The second way that divergent activity influences an organisation is that it encourages behaviour which deviates from the organisational norm by nurturing flexibility. Burgelman (1983) argues that strategic development requires, "*the interlocking autonomous strategic initiatives of individuals at operational and middle levels, and an experimentation-and-selection at corporate level."* (1983 p. 67). Therefore, *facilitating adaptability* is important in trying new ideas which may develop into new organisational strategies.

The argument that the divergent activity of middle managers is important in the development of strategy due to their particular knowledge and experience leads to consideration of two issues. First, the nature of the relationship between divergent activity and organisation performance needs clarification. Second, the factors encouraging managers to engage in divergent activity need to be explored. Despite the work of Burgelman (1983), Kanter (1982) and Wooldridge and Floyd (1990), the role of contingent factors is not fully researched. Factors encouraging divergent activity are reviewed in the next sub-section.

2.3.3.1 Antecedents of Divergent Activity

Floyd and Lane (2000) suggest that the very nature of divergent activity may itself be a constraining factor. A middle manager engaging in divergent activity will also be expected to undertake integrative activity implementing a current strategy. Floyd and Lane (2000) draw on the work of Rizzo et al. (1970) to propose a factor constraining the ability of managers to act in both Integrative and divergent ways, which they call 'strategic role conflict'. Managers are "*required to play multiple strategic roles or when change erodes the trust needed for relationships between managers playing different roles*" (Floyd and Lane, 2000 p. 171). They argue strategic role conflict is inevitable in strategic renewal as managers are required to

perform both integrative and divergent activity. First, managers need to pursue the approaches and competencies to support the existing strategy. Second, they also need to engage in divergent and innovative activities. Floyd and Lane see this inconsistency of expectations as being most apparent for middle managers. They state,

> *"This level of management* [middle manager] *fulfils the broadest range of strategic roles. In order to interact with operating management, middle managers must maintain a degree of technical competence and a detailed understanding of the organisation's capabilities. To interact with top management, they must also understand the organisation's goals and competitive strategy as well as the political context in which these are developed."* (Floyd and Lane, 2000 p. 164)

Drawing on the work of Khan et al. (1964), Rizzo et al. (1970) suggest that managers faced with role conflict will try to avoid the stress this causes. This is supported by Floyd and Lane, who note,

> *"The less clearly defined the roles, the greater the stress created by role conflict and the more likely that individuals will use avoidance, lying or organisational exit."* (2000 p.162)

A manager experiencing role conflict through competing demands and expectations will try to remove the source of stress by simplifying the situation. This can take the form of giving undue focus to only a small range of expectations or demands on them, or limiting their activity to more Integrative work staying within the existing strategy. Organisations therefore wishing to encourage divergent activity in middle managers need to mitigate the stress caused by strategic role conflict. However, the research identifying how this can be done is limited and predominantly looks at manufacturing organisations in dynamic environments.

Wooldridge, Floyd and Schmid (2008) review the studies of middle manager strategic activity and conclude that it can be affected by environmental, organisational and individual factors. In the only study in this field comparing private and public sectors organisations, Shillit (1987) interviews 60 managers exploring the perceived impact of their strategic activities over a two-month period. He concludes that middle managers are least involved in strategic development in large public sector organisations and most involved in large private sector companies. This supports the view that environmental and organisational factors may constrain the ability and

willingness of middle managers to engage in strategic activity. The study does not separate divergent and integrative activity and the reasons for the differences between the sectors are not explored. However, more recent studies in the UK National Health Service (NHS) (Currie, 1999; Currie, 2000) suggest different factors constraining strategic activity of middle managers in a public sector context.

Currie applies the Floyd and Wooldridge (1992) model to the changing role of middle managers in the NHS. In two papers based on a case study of a single hospital he concludes that the top-down nature of planning in the NHS causes the influence of managers to be predominantly downwards through modifying implementation of deliberate strategy (1999; 2000). In a later work looking particularly at middle managers' involvement in strategic planning in the NHS, he proposes that the professional bureaucracy structure, the performance structure imposed by the government, and the role ambiguity coming from organisational changes, constrain managers from acting strategically (Currie and Procter, 2005).

The broad findings about how middle managers in the NHS are affected by organisational factors are developed in more recent research (Burgess and Currie, 2013). This theorises that some middle managers should be seen as 'hybrid' having professional clinical knowledge putting them in the powerful position of brokering knowledge between different groups. This supports the views of Meyer (2006) that any study should look for sub-groups within the middle manager population. How this particular group of hybrid managers is influenced by antecedents is not yet studied.

The conclusion of Currie and Procter (2005) about the impact of government policy raises questions about how stakeholders outside the organisation may influence middle manager activity. The authors highlight the impact of the expectations of a single powerful stakeholder (in this case the government). However, it is unclear whether more generally the numbers and diversity of external stakeholders around an organisation can affect middle managers' ability to engage in divergent activity. This is reviewed in the next sub-section of this chapter.

Currie and Procter (2005) conclude that middle managers are constrained in engaging in divergent activity by the professional bureaucracy structure of the NHS. This is supported by Westley (1990) who proposes that middle managers' inclusion in strategic activity will be more successful in organisations with a balance of elites and without a strong ideology. These ideas

highlight the importance of organisational factors in influencing managers' activities. These are reviewed in the next sub-section.

2.3.3.2 Organisational antecedents

This sub-section reviews a number of studies which identify the importance of organisational factors in encouraging middle manager divergent activity. The studies suggest that actions of top management are important in establishing an environment in which divergent activity can take place. However, the detail of the findings about contributing factors involved remains inconclusive, and will include informal as well as formal aspects (Pinchott, 1985).

Hornsby et al. (2002) use two samples with a total of 761 middle managers in 17 US and Canadian firms to assess a measurement scale of how perception of middle managers encourages corporate entrepreneurial activity. They identify five factors accounting for 46% of the variance of the model. These are the level of top management support, the degree of autonomy of the manager, the nature of rewards, the time available and the nature of organisational boundaries. They find that top management support is the most significant factor independently accounting for 22.2% of the variance compared to the other factors which each independently account for less than 6.5%. The authors conclude that "*understanding middle manager perceptions about the internal corporate environment is crucial to initiating and nurturing any entrepreneurial process.*" (Hornsby et al. 2002 p.254)

This finding about the importance of top management support is backed up by other studies. In a 3-year case study in a single organisation, Ghoshal and Bartlett (1994) propose that tangible and concrete management actions are responsible for building *'organisational context'.* They identify support of top managers, trust, discipline and stretch as key aspects leading to more entrepreneurial activity. Smina and Van Nistelrooij (2006) report a similar finding in a public sector study in the Netherlands. They identify the importance of the right culture in facilitating middle manager activity and conclude that top management has a pivotal role in facilitating the environment within which the participation of more junior managers can take place.

Mantere (2008) develops these ideas and adds detail to how top management can encourage divergent activity in a study of 262 managers in 12 North-European professional service organisations in government and private sectors. He uses the model of middle manager strategic activity developed by Floyd and Wooldridge (1992) in semi-structured interviews to explore the antecedents of the activity of those throughout the organisation who are trying to

influence strategic issues. His findings support the conclusion of Ghoshal and Bartlett (1994) and Hornsby et al. (2002) about the importance of top management support. He concludes that *facilitating adaptability* requires trust with top managers encouraging new ideas and having open communication about success and failure. In a similar way, *championing alternatives* requires an invitation from the top management who then act as a referee for the ideas coming forward. However, Mantere (2008) finds no difference between government and private sector organisations in the proportion of middle managers who view themselves as 'strategic champions'. He proposes that differences in the level of divergent activity are more influenced by the history of strategic debate in the organisation than by its field of work.

Organisational antecedents of divergent activity involve top management setting the context and middle managers perceiving that activity will be supported. This support can be through formal or informal structures and activity. A series of studies reviewed in the next sub-section proposes that both formal and informal structures need to be in place. These studies suggest that the autonomous and entrepreneurial actions comprising divergent activity are facilitated by clear formal structures. However, the way that these structures interact with the divergent activity of the actors involved is under researched.

2.3.3.3 Divergent activity and organisational control structures

The idea that divergent activity occurs within supportive and complementary organisational structures builds on the work of Burgelman (1983) and is supported by empirical research. In a case study of a multinational company, Bartlett and Ghoshal (1993) find parallel processes at work. One process aims to give coherence and economies to the organisation. The second focuses on spurring innovation. These two processes can be compared to the *integrative* and *divergent* strategic activities suggested by Floyd and Wooldridge (1992). The fact that these processes co-exist suggests a relationship between them. Effective divergent activity for an organisation may be encouraged and facilitated by the other strategic processes in the organisation.

Lovas and Ghoshal (2000) support this view for the relationship between strategic processes in a case study based on a Danish international company. They find that strategy is developed by autonomous behaviour at lower levels of the organisation which is guided by the strategic intent from the top management in a way they describe as 'guided evolution'. Grant reaches similar conclusions from a study of large oil companies in a turbulent environment (2003). He sees

"*planned emergence*" at work where strategy emerges through the actions of junior staff under the umbrella of a broad direction about outcomes, rather than any detailed plans set by the organisation.

In a study of the police and army in Scandinavia, Kirkhaug (2009) emphasises that it is the perceptions of the middle managers which determine the impact of organisational processes. He finds that the imposition of rules, procedures and instructions on organisations can increase role conflict if they are perceived by managers as unnecessary. This challenges the earlier ideas of Rizzo et al (1970) who suggest that formulisation (working within clearly defined rules) assists managers through restricting exposure to competing demands. The finding also suggests that the effectiveness of any interaction between middle and top managers depends on the perception of the organisational context.

There is theoretical and empirical support for middle manager strategic activity influencing organisational performance. However, the relationship between divergent activity and performance is not well understood. While research suggests that the level of middle manager divergent activity varies between organisations, the reasons for this are not fully explored (Wooldridge et al., 2008). Most of the studies have also taken place in the competitive and dynamic environments of private sector companies.

A summary of the key studies relating to middle manager divergent activity is in Table 1. Section 2.4 next reviews the literature relating to stakeholders who form an important aspect of the external environment, especially for the public sector organisations who are the focus of this study.

Authors	Approach	Findings/propositions
Kanter 1992	Qualitative study of 5 US firms`	Innovative activity in middle managers is important and is encouraged by a range of structures and systems.
Burgelman 1983	Conceptual	Posits the importance of autonomous behaviour in setting the strategic context. Sees corporate entrepreneurship as diversification from internal activity.
Floyd and Wooldridge 1990	Survey and interviews in 9 US banks and 11 manufacturing firms	Recognises link between middle manager strategic activity and organisation performance.
Westley 1990	Conceptual	Suggests that middle managers in bureaucratic organisations often feel frustrated and excluded from strategic conversations. Proposes inclusion is effective where: - there is a balance of elites in the organisation; - the organisation is not ideologically driven.

Floyd and Wooldridge 1992	Survey of 259 middle managers in 25 US firms from range of industries	Identified link between strategic behaviour and strategy followed (Miles and Snow 1978). More Divergent activity in 'Prospectors'.
Dutton and Ashford 1993	Conceptual	Issue selling is middle manager critical activity in the early stages of strategic decision making because they can: - provide or conceal information about issues; - frame an issue in a particular fashion; - direct top management attention to issues by mobilising resources; and, - link actions and ideas between the technical and institutional levels.
Lumpkin and Dess 1996	Conceptual	Autonomy is a salient dimension of an Entrepreneurial Orientation of an organisation.
Floyd and Wooldridge 1997	Same data as 1992 study	Divergent activity linked to boundary spanning positions Variety of Divergent activity linked to organisation performance.
Dutton et al 1997	Qualitative study of 30 middle managers in US telecoms company	Favourable factors for issue selling include: top manager willingness to listen – supportive culture – not violating organisational norms.
Thakur 1998	Study of top and middle manager from 31 US manufacturing firms	Top management need to accept that the role of middle managers has changed from that of a technocrat to a knowledge-based individual.
Currie 1999	Case study of UK NHS hospital	Divergent activity declined over time due to top down implementation process of government strategy.
Barringer and Bluedorn 1999	Study of 69 large US manufacturing firms	Correlation between Corporate Entrepreneurship Intensity and some strategic management practices. Measure of corporate entrepreneurship using scale based on innovation, risk-taking, and proactivity.
Andersen 2000	Quantitative study in three industries	Centralised strategic planning and managers autonomous actions are complementary but independent. Autonomous activity linked to performance in dynamic and complex environments. Both planning and autonomy together link to higher performance than just one.
Marginson 2002	Longitudinal study of UK communications company	Belief systems affect strategic climate. Grass roots activity is shaped by administrative controls. Greater the manager's strategic domain – more likely to champion.
Meyer 2003	Study of middle manager activity in 4 post-merger Nordic companies.	Middle managers cannot be seen as resistor or implementers. This can vary between different groups. A more complex view of their motivation needs to be found.
Andersen 2004	Survey of 185 European manufacturing firms	Effective organisations complement decentralised structures with formal processes.
Balogun and Johnson 2003	Longitudinal case study of a UK privatised utility company	Middle managers shape change in the absence of senior managers.
Pappas 2004	Study of middle managers in a US hospital using peer evaluation based on Floyd and Wooldridge (1992) scale	Confirms link between divergent activities and boundary spanning position. Links divergent activity to network centrality.
Currie and Procter 2005	Case studies of 3 UK NHS health trusts	Middle manager strategic activity constrained by Professional Bureaucracy structure and government policy.
Pappas and Wooldridge 2007	Survey of 89 middle managers in US hospital	Divergent activity linked to network centrality and boundary spanning positions.

Burgess and Currie 2013	Theoretical paper on knowledge brokering role of middle managers	Highlight the importance of 'hybrid' managers in the public sector who have both management and professional knowledge and expertise in brokering knowledge between groups.

Table 1 - Key studies in middle manager divergent activity

2.4 External stakeholder salience

This section reviews the current literature on how stakeholders influence organisations. Greenley et al's findings (2004) that managers' views about stakeholders affect the approach to strategy development in organisations. This raises questions about how stakeholders influence managers' activities. Currie and Proctor (2005) find that the power of particular stakeholders can constrain middle managers' willingness to engage in divergent activity but the reason for this is not fully understood.

The section reviews the research on the influence of stakeholders and examines the nature of the influence. It shows that while attitudes towards stakeholders can affect organisational processes, the influence of stakeholders on individual managers is little studied.

2.4.1 Organisation stakeholders

Stakeholder theory dates back to the work of Freeman (1984). It argues that organisations have relationships with people and groups inside and outside the organisation whose interests it must take into account to maintain their support.

Writers propose a range of definitions of stakeholder which Bryson (2004) suggests vary principally in relation to "*how inclusive they are*" (p. 22). Two broad views emerge in the literature. First, there is a narrow view which focuses on the people or groups *"on which the organisation is dependent for its continued survival"* (Windsor, 1992 p. 91), or "*those who have the power to directly affect the organisation's future*" (Bryson, 2004 p. 22). These are primarily those stakeholders who have legitimacy (e.g. owners, employees).

Second, there is a broader view of stakeholders following the definition used by Freeman who proposes "any *group or individual who can affect or is affected by the achievement of the organisation's objectives*" (Freeman, 1984 p. 46). This definition includes all who can have some influence (e.g. the press, or pressure groups) and includes those who do not have contractual or legal authority, and which Eesley and Lenox (2006 p. 765) call "*secondary*".

Porter and Kramer (2011) suggest that there has been a move away from a focus on the narrow view of stakeholders particularly fuelled by public distrust of corporations and power of shareholders following the financial crash in 2008. Similar moves are also apparent around the UK public sector with an increase in external accountability, for example with the introduction of elected Police and Crime Commissioners.

Thomas and Poister (2009) suggest that a broader definition including 'secondary' stakeholders is more appropriate for a public sector organisation because of "*concern for the consent of the governed*" (p. 69). This is supported by Knox and Gruar (2006) in a study of the marketing focus of a UK charity who conclude that not-for-profit organisations have a wider variety of influential stakeholders because of their broader range of non-financial objectives.

This view of the complexity of the stakeholder relationship associated with public sector organisations is also put forward by Bryson (2004) who states,

> *"Stakeholder analyses are now arguably more important than ever because of the increasingly interconnected nature of the world. Choose any public problem – economic development, poor educational performance, natural resources management, crime, AIDS, global warming, terrorism – and it is clear that 'the problem' encompasses or affects numerous people, groups and organisations. In this shared-power world, no-one is fully in charge." (p. 23)*

Faced with a broad range of stakeholders, organisations give priority to particular groups. A theory of why some stakeholders are viewed as more important by managers is offered by Mitchell et al. (1997).

2.4.2 Causes of influence

Following a review of previous work, Mitchell et al. (1997) propose a principle of stakeholder salience which they define as *"the degree to which managers give priority to competing stakeholder claims"* (1997 p. 854). This provides a way of assessing how a manager decides between competing stakeholder claims.

The model of stakeholder salience is further developed by Agle et al. (1999) who suggest that managers will give priority to stakeholders depending on the manager's perception of the extent to which a stakeholder's claim fulfils one or more of three criteria:

Legitimacy – the extent to which the claim is based on contract, exchange, legal title, legal right, moral right etc.

Power – the extent to which the stakeholder has the power to influence the organisation.

Urgency – the degree to which a stakeholder's claim calls for immediate action.

(Agle et al., 1999 p. 508)

Agle et al. suggest that the stakeholders with least salience are the ones who only fulfil one of the criteria. For example, in Figure 5 stakeholders perceived as having only power but no legitimacy or urgency have been characterised as 'dormant'. Conversely the stakeholders with highest salience are perceived to have all three criteria and are termed 'definitive'.

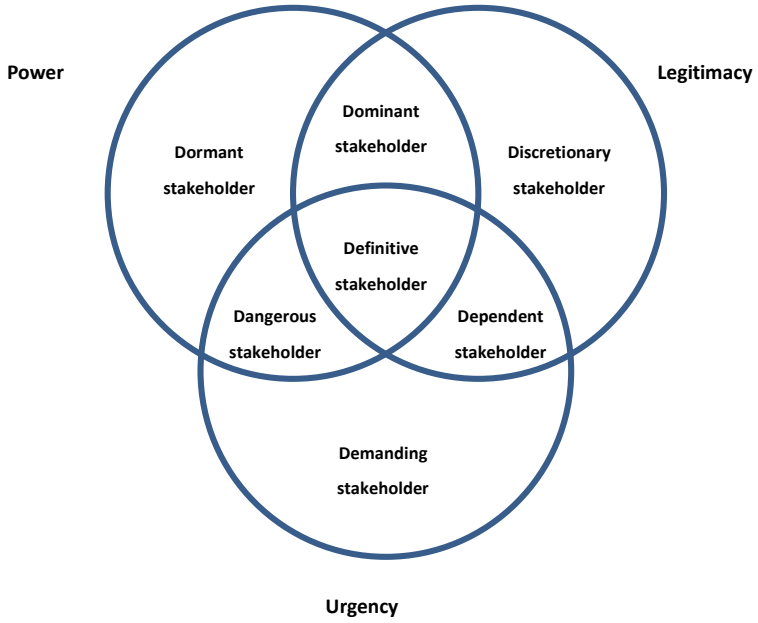


Figure 5 – Model of stakeholder salience (Agle et al. 1999)

In an empirical work looking at the perceptions of a sample of US CEOs, Agle et al. (1999) find strong support for the model. The study looks at the salience of five broad stakeholder groups: shareholders, employees, customers, government and community. They conclude that the *"stakeholder attributes do affect the degree to which top managers give priority to competing stakeholders"* (1999 p. 520) and find that urgency is the best predictor of salience. The study also looks at links between the salience of stakeholders and organisation performance. While most links are not significant, the study identifies a negative correlation between government salience and corporate performance (r = .23).

Eesley and Lenox (2006) support the finding that urgency is the best predictor of salience in a study of 600 secondary stakeholder demands on US firms between 1971 and 2003. They develop Mitchell's ideas in arguing that the salience arises out of the 'demands' rather than being attached to the stakeholder.

In a study looking at not-for-profit organisations, Parent and Deephouse (2007) use Agle et al's model to consider how the roles of stakeholders develop around a large sporting event. The work supports the principle that perceived salience will be connected to how many of the three attributes in the model are applicable. The study also finds that salience can vary, with different stakeholders becoming more salient as an enterprise develops. This is supported by the findings of Eesley and Lenox (2006) that salience is a factor of the demand, not the stakeholder. However, this idea that salience can change over time raises a question about how environmental factors affect salience. This may question the overall finding of Eesley and Lenox (2006) and Agle et al. (1999) about the general importance of urgency.

In contrast to Agle et al., Parent and Deephouse (2007) find power has the most important effect on salience while urgency is least important. The study also concludes that managers' roles can moderate the perception of salience. This may explain the different finding from the earlier study. Additionally, the focuses of the studies differ. The earlier one considers the continuing operation of successful organisations whereas the later work looks at the organisation around single, time limited events.

The influence of stakeholders on the activities of organisational members such as middle managers has not been explored. How dealing with multiple stakeholders actually influences the activity of a middle manager has yet to be studied, despite its importance for organisations faced with a variety of stakeholder demands, such as those in the public sector.

2.4.3 Link between stakeholders and organisational activity

In the first study examining the link between the orientation to multiple stakeholders and organisation performance, Greenley and Foxall (1997) consider five stakeholder groups. These are unions, competitors, shareholders, consumers and employees. Using a sample of 242 large UK companies they explore how aspects of strategy development are influenced by the extent to which an organisation takes the views of the different groups into account. They conclude that there is a link between organisation performance and the orientation of the organisation

towards its stakeholders though this is moderated by industry factors such as growth and hostility.

Greenley et al. (2004) further examine how stakeholder orientation impacts on managers. They conclude that a company which focuses on the demands of customers, competitors and employees exhibit more innovation and learning in their strategy development. Conversely, firms which pay little attention to their stakeholders are found to display low levels of innovation.

This idea that multiple stakeholders can be linked to increased innovative thinking is supported by Kuratko et al. (2007) who consider the organisational approach to multiple stakeholders, looking at investors, customers, employees, managers, suppliers, community. They conclude that managers can gain entrepreneurial opportunities from engaging with multiple groups. These findings challenge Currie and Proctor (1999) who find that the power of a single external stakeholder can constrain the ability of managers to think and act innovatively.

It is clear that the *salience* of stakeholders has an impact on the activities of managers in organisations. Mitchell et al's (1997) idea of *salience* offers a model for describing and understanding the influence of stakeholders on individual managers. However, the research highlights the complexity of any impact. In particular understanding the impact of stakeholders in public sector organisations is little studied. Despite the importance of external stakeholders in public sector organisations, most of the studies have are of profit making organisations. In a review of stakeholder research between 1984 and 2007, Laplume et al. (2008) find that only three of 49 studies involve not-for-profit organisations.

Agle et al's (1999) finding about the impact of government *salience* suggests that stakeholders internal to the organisation may influence in a different way to those who are external to it. Internal and external stakeholders need to be clearly separated to study the impact of particular groups.

A summary of the key studies relating to stakeholder influence is in Table 2.

Authors	Approach	Findings/propositions
Mitchell et al. 1997	Theoretical study reviewing research on stakeholder.	Proposes principle of stakeholder salience linked to power, urgency and legitimacy.
Greenley and Foxall 1997	Study of UK companies considering extent to which managers focus on the views of unions, competitors, shareholders, consumers and employees	Focus of managers linked to organisational performance.
Agle et al. 1999	Empirical study of 80 large US firms.	Confirms Mitchell's model that power, urgency and legitimacy linked to salience. Concluded urgency is best predictor of salience.
Bryson 2004	Conceptual paper considering the analysis of stakeholder groups	Public sector organisations need to take a broader view of stakeholders than private sector companies.
Greenley et al. 2004	Survey of senior marketing executives in 485 UK companies	Learning and innovation in the strategy development process varies between firms with different stakeholder focuses.
Knox and Gruar 2006	Case study of UK medical research charity	Wider range of stakeholders is influential in not-for-profit organisation.
Parent and Deephouse 2007	Longitudinal study of major sporting event	Salience of stakeholders can vary over the lifetime of a project. Power is the best predictor of salience.
Kuratko et al. 2007	Theoretical paper considering link between stakeholder orientation and corporate entrepreneurship.	Argues that relationship with larger number of stakeholders leads to greater corporate entrepreneurial activity in managers
Thomas and Poister 2009	Case study of US state agency	Broader definition of stakeholders necessary for public sector agency because of "concern for the consent of the governed"

Table 2 - Key studies on stakeholder salience

The sections discuss the importance of middle manager divergent activity and how this can be influenced by stakeholders. Middle manager activity is also affected by their perception of top management. A key aspect of top management activity is revealed through the way that strategy develops in an organisation. Exploring how and why strategy development processes influence the motivations of individual managers is important in understanding the processes as antecedents of divergent activity. The research about strategy development processes and how they impact on organisations is reviewed in the next section.

2.5 Strategy development

This section considers the literature on the development of strategy and how researchers have searched for increasingly multi-dimensional models to explain the processes at work and their impact on organisations. Studies of how strategies develop in organisations reveal a complex process. Some research fails to take account of this complexity and this leads to difficulties in

identifying relationships between strategy development processes and organisational outcomes (Rudd et al., 2008; Andrews et al., 2009). A number of attempts to develop more comprehensive models of strategy development are considered. Seeing strategy development processes as a mixture of different dimensions allows a fuller description of the complexity involved and enables the impact of the process to be better evaluated.

2.5.1 Strategic planning

Strategic planning, with its emphasis on formal processes, data gathering, rational analysis and objective setting, remains the predominant way in which large commercial and public organisations develop strategy (Whittington and Cailluet, 2008). Despite this popularity, there is no consensus about the link between formal strategic planning and organisation performance. As part of a study of strategic planning in unstable environments, Brews and Purohit (2007) review the previous research and conclude, *"with proper construct measurement and proper controls in place, positive formal planning/performance relationships have been consistently noted." (p. 67).* However, Falshaw et al. (2006) find no support for the link between the formality of planning and financial performance in a sample of UK manufacturing firms. O'Regan and Ghobadian (2007) also do not identify any link in a sample of UK small and medium-size enterprises and suggest that how seriously a firm approaches planning may be a contingent factor. The continued elusiveness of this relationship suggests that the *"proper construct measurement"* demanded by Brews and Purohit (2007) requires a more detailed definition of strategic planning than has previously been used.

In a study of attitudes towards planning in UK companies Glaister and Falshaw (1999) note that there is no consistency about what comprises strategic planning. Boyd and Reuning-Elliott (1998) also criticise this lack of consistency and, using a study of 139 CEOs propose that strategic planning is a single dimensional construct which can be measured using seven indicators of rationality and formality. These are the existence of a mission statement, trend analysis, competitor analysis, long term and annual goals, action plans and evaluation.

This single dimensional model of strategic planning, based on the degree of formality, has been commonly used (for example by Rudd et al., 2008) but the approach is criticised by Elbanna (2006) for only representing a limited picture of how strategy forms. In a study of the link between performance and strategy formulation in Welsh local authorities, Andrews et al. (2009) compare formal planning and more incremental approaches. They conclude that strategy

processes do make a difference to performance in public sector organisations but they do not find a significant link with organisation performance. They suggest that *" It may be that future studies should explore alternative and more nuanced approaches to strategy formulation"* (2009 p. 14), and that more work is needed looking at *"combinations of strategy formulation"* (p. 15).

The view that strategy-making is complex and nuanced flows from the work of Mintzberg and Waters (1985). They theoretically propose that strategy forms through a mixture of deliberate and emergent processes forming a continuum, not a dichotomy, and both will be at work in an organisation. This view is supported by Glaister and Falshaw (1999), in a survey of the perceptions of 113 top managers in UK public limited companies. They find that strategy-making is neither entirely deliberate nor emergent, but a mixture of both.

The conclusion that formal planning and incremental approaches happen simultaneously is developed by more recent empirical studies which find that the two approaches interact to be effective. Lovas and Ghoshal (2000) identify "*guided evolution*" at work in a Danish company where strategy forms more incrementally at lower levels of the organisation, guided broadly by the direction chosen by top managers. The interaction of deliberate and emergent processes is also identified and termed "*planned emergence*" by Grant (2003 p. 515) in a study of large oil companies.

The importance of the link between deliberate and emergent processes is developed by Brews and Hunt (1999) in a study of the planning processes of 656 companies. They conclude that good planning is about both formal planning and advancing incrementally, especially in unstable environments. These ideas, that deliberate and emergent processes interact, are further developed by Andersen in a series of studies of US companies (2000; 2004). He finds formal strategic planning and the emergence of strategy through autonomous actions of managers is complementary. Both processes working together link to higher economic performance in firms in dynamic environments, especially for international companies (Andersen 2004). He concludes, "*firms operating in dynamic and complex industries reach significantly higher performance levels when they adhere to both approaches simultaneously*" (2000 p. 1275). The mechanism through which the approaches impact on the organisation is not clear and Andersen (2004) acknowledges that his sample is small. He calls for more work to understand more about how the approaches link to performance and the significance of the external environment.

These studies challenge the view that the one-dimensional definition of strategic planning suggested by Boyd and Reuning-Elliott (1998) is adequate to measure the development of strategy in an organisation. For planning to be effective, it needs to interact with emergent processes. Understanding this interaction requires a meshing together of the deliberate and emergent processes at play in strategy formulation. This has led to attempts to develop an integrated model which includes the full range of strategy development activity.

2.5.2 The search for an integrated model of strategy development

In an effort to explain in more detail the processes through which strategy develops, a series of research focuses on the behaviours of managers associated with the planning process. Earlier attempts look at the different styles of strategy development which are apparent in organisations. In an empirical study Shrivastava and Grant (1985) identify four different styles which they label: *managerial autocracy; systemic bureaucracy; adaptive planning and political expediency*. These predominantly focus on different aspects of deliberate strategy-making and do not take account of more emergent processes.

Hart (1991; 1992) reviews the strategy-making typologies proposed in the previous decade and concludes that none captures the full range of processes through which strategies are developed. He proposes a two-dimensional model (Figure 6), adapting the one-dimensional intentionality continuum (deliberate–emergent) of Mintzberg and Waters (1985) and adding a second dimension (behaviours). The horizontal axis draws on the work of Burgelman (1983) and considers the extent to which the strategic activity is the result of induced or autonomous behaviour. Induced behaviour is the result of the use of structures and formal control systems by top management. In contrast, autonomous behaviour occurs through the encouragement of individual initiative at lower levels in the organisation.

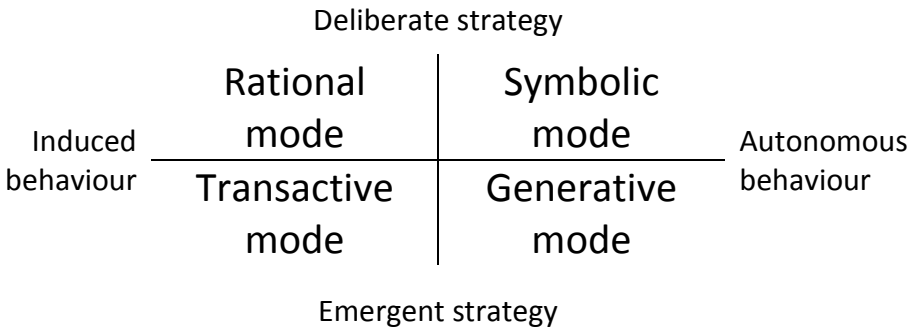


Figure 6 – Modes of strategy making (Hart, 1991)

The model sets out four generic modes of strategy-making. These are described in Table 3.

Rational	The execution of rational plans produced by top management.
Symbolic	The creation of a common perspective by top management.
Transactive	The emergence of strategy through transactions between organisational actors and stakeholders.
Generative	Strategy through internal entrepreneurship throughout the organisation.

Table 3 - Modes of strategy making (Hart 1991)

Hart tests the model with a survey of 916 CEOs from US private sector organisations varying in size and industry (Hart, 1991) and concludes that, to be effective, strategy-making requires the interaction of a range of approaches.

Hart's model (1991) develops the single-dimension deliberate-emergent model described by Mintzberg and Waters (1985). It recognises the role of autonomous activities in organisations as described by Bourgeois and Brodwin (1984). It particularly identifies the importance of entrepreneurial behaviour by managers as important in organisations developing, a theme subsequently developed by the Corporate Entrepreneurial School (Barringer and Bluedorn, 1999).

However, Hart's model does not reflect a situation where the organisation's environment dictates patterns of action described as *imposed* strategy Mintzberg and Waters (1985). Additionally Hart's modes are broad. The *rational* mode includes formal synoptic planning approaches as well as more autocratic styles of the type described as *commande*r by Bourgeois and Brodwin (1984). The modes do not therefore identify and separate the full range of different potential influences on the development of strategy in an organisation.

Hart develops these modes to reflect the different potential approaches of a CEO and adds a fifth mode, *command* (Hart, 1992 p. 334). This is where strategy is driven by the leader or small top team and it aligns with the *commander* style of Bourgeois and Brodwin (1984) and the e*ntrepreneurial* strategy of Mintzberg and Waters (1985). The five different modes have significant implications for the members of organisations. They suggest roles for top managers ranging from that of a commander issuing strategy, to a sponsor recognising and supporting the

actions of others in the organisation. In the same way, the role of other organisational members, including middle managers, ranges from that of 'good soldiers' (in the *command* mode) to entrepreneurs (in the *generative* mode) (Hart, 1992 p. 333).

Hart and Banbury (1994) assess Hart's 5-mode model using a survey of CEOs of 285 US firms in a range of industries. They find the modes to be strongly inter-correlated (r = .13 - .40) but confirm that they represent distinct approaches. Hart and Banbury also explore the relationship between working in multiple modes and organisation performance and find it complex and contingent on organisational size and turbulence of the environment. The link between strategy development and organisational outcomes is discussed in section 2.5.4.

More recent studies support the comprehensive nature of Hart's model but its use in analysing strategy development processes has been problematic. Bowd (2003) concludes that the original model is conceptually very sound (p. 191) but his work fails to replicate the original framework of Hart (1992). In his study of the strategic activity of middle managers and organisation performance in a sample of manufacturing firms around Calgary, Canada, Bowd develops an amended framework which he contends *"maintains many of the characteristics of the original"* (2003 p. 228). However, his work does not identify the s*ymbolic* and *transactive* modes of Hart. It also differentiates *autocratic* (where the CEO sets the strategy on the basis of analysis) from c*ommand* (where the CEO sets strategy and determines the vision) (Bowd, 2003 p. 175). Bowd suggests that situational and methodological factors may contribute to the different findings. He highlights particularly that Hart and Banbury (1994) consider the views of CEOs, whereas his research focuses on middle managers who may bring a different perspective to their responses.

Dess et al. (1997) use a modification of Hart's model to explore the relationship between entrepreneurial strategy-making, external environment, and organisation performance in a sample of 96 executives from 32 US firms in manufacturing and service industries. They identify four separate strategy-making *Factors* which they label: *participative*; *adaptive; entrepreneurial* and *simplistic*. The *participative* and *adaptive* factors share many of the features of Hart's (1991) *planning* and *transactive* modes. The *simplistic* factor also includes aspects of *planning* and *transactive* modes but highlights where cultural issues mean that the strategy-making has become limited and routine. These factors focus more on the activities of organisational actors but they do not consider the motivation for the activity such as the extent to which it is guided by rational analysis or changes in the external environment.

Dess et al. (1997) particularly differentiate their model from Hart's work in identifying an *entrepreneurial* approach. They find that *entrepreneurial* strategy-making (which they argue combines significant aspects of Hart's *command* and *generative* modes) is independent of the other factors. They identify a relationship between entrepreneurial strategy-making and organisation performance for organisations in uncertain environments following innovative differentiation strategies. This relationship is reviewed further in section 2.5.4.

Balabanis and Spyropoulou (2007) apply the model used by Dess et al. (1997) in a study of UK companies involved in exporting. They find that the link between the strategy development mode and organisation performance is moderated by environmental uncertainty. Using a survey of 82 managing directors, they conclude that the *entrepreneurial* mode is positively linked to higher profit and growth, except for organisations wanting growth in a non-hostile environment where the *adaptive* mode links to higher performance. They do not find support for *participative* or *simplistic* modes being superior in any environments.

The Strategy Development modes proposed by Hart (1992) establish the importance of taking a multi-dimensional view of strategy development. However, recent studies do not replicate the model (Dess et al., 1997; Bowd, 2003) and findings about the relationship between the modes and organisation performance are inconsistent (Hart, 1991; Hart, 1992; Hart and Banbury, 1994). This suggests the modes are not comprehensive and do not represent fundamental dimensions of strategy development. Additionally Hart's dimensions may actually include combinations of dimensions being affected by contingent factors. Exploring this further requires a more detailed model of the activities involved in strategy development. This is offered by Bailey et al. (2000).

2.5.2.1 Dimensions of strategy development

Bailey et al. (1995; 2000) define a comprehensive framework of strategy development through considering the influences on strategic decisions in organisations. From a review of previous work looking at strategy development, they identify three broad themes. First, the idea of strategy coming from managerial choice. This occurs either through command from a senior person (as identified by Bourgeois Iii and Brodwin, 1984), or from rational planning approaches (for example see Ansoff, 1965). Second, the principal that strategy can grow incrementally either through deliberate iteration (as described by Quinn, 1980), or the interaction of social, political or cultural processes inside the organisation (Cyert and March 1992). Third, where

factors in the external environment encourage or force the adoption of certain strategies (Hannan and Freeman, 1989). From these themes they define six dimensions of strategy development. These are described in Table 4.

Bailey et al. (2000) validate the model using an extensive sample of 5,332 managers from 932 organisations covering both private and public sectors. They identify significant relationships between individual dimensions and an overall measure of organisation performance. This s discussed in the following sub-section.

Planning	Where strategy comes from an intentional process involving logical, sequential, analytic and deliberate sets of procedures.
Incremental	Where strategic choice takes place through successive limited comparisons.
Cultural	Where strategy is influenced by taken-for-granted frames of reference shared among organisational members.
Political	Where organisations are a political area in which decision making and strategy development is a political matter.
Command	Where a particular individual is seen to have a high degree of control over the strategy followed.
Enforced choice	Where factors in the environment encourage the adoption of organisation structures and activities that best fit that environment.

Table 4 - Strategy-making dimensions (from Bailey, Johnson and Daniels 2000 p. 153)

In a study of the link between middle manager involvement and perceptions of strategy development processes, Collier et al. (2004) develop Bailey and Johnson's model adding another dimension of *collected vision*. The research surveys 6,394 managers at various levels in 601 public and private sector organisations. Their findings show that this added dimension significantly correlates with *planning* (r = .68), suggesting that it is not an important addition to the model. Collier et al. support the dimensions reported by Bailey et al. (2000) but divide *enforced choice* into two dimensions depending on whether it is caused by a business or non-business constraint. They conclude that dimensions based on these two types of constraints also correlate strongly (r = .51). This suggests that dividing the *enforced choice* dimension in this way does not significantly augment the model's validity. Collier et al. also find that the dimensions converge in two groups. The first being *planning, collective vision* and *incremental* (which they term *adaptive*) dimensions (r = .21 - .68). The second includes *command*, *culture*, *politics* and *constraints* (r = .06 - .51). This supports the idea of the dimensions combining into a number of distinct profiles.

2.5.2.2 Comparing the strategy development dimensions to previous models

Bailey and Johnson suggest that five of the six dimensions relate closely to the modes suggested by Hart (1992), but comparison shows that the dimensions extend and add detail to Hart's modes. Figure 6 shows Bailey et al's (2000) dimensions mapped onto the two dimensional model of Hart (1991) already shown at Figure 7. Three of the dimensions (*planning*, *command* and *enforced choice*) relate to the way that strategy is induced in an organisation. The other three dimensions (*incremental*, *cultural* and *political*) add detail to the possible drivers and causes of autonomous behaviour of managers.

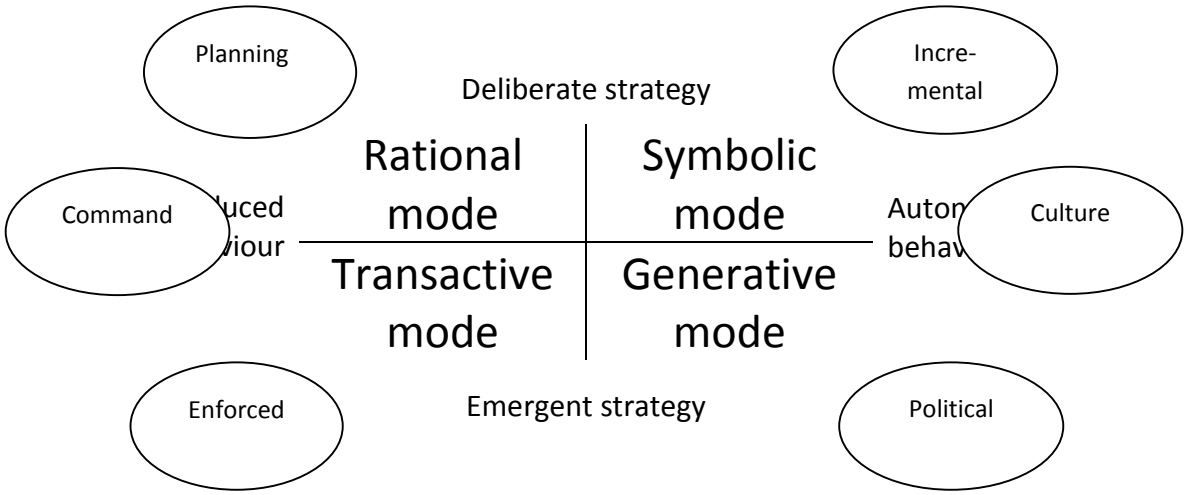


Figure 7 – Dimensions of Bailey et al. (2000) mapped on Hart's model (1991)

A chart of how the different modes and dimensions broadly map against each other is shown in Table 5. The comparisons approximate because of the different approaches taken, but it can be seen that the dimensions of Bailey et al. extend beyond the other models in including *enforced choice* and consider in more detail the internal working of organisations through considering c*ultural* and p*olitical* dimensions. Additionally, the table suggests how some of Hart's modes may result from combinations of dimensions. For example, Hart's *symbolic* mode, where top management create a common perspective combines the *command*, *cultural* and *incremental* dimensions.

By developing the model on the basis of different approaches to strategic decisions, Bailey et al. (2000) offer a generic and comprehensive tool to explore perceptions of the formal and informal processes around strategy development.

Bourgeois and Brodwin 1984	Shrivastava and Grant 1985	Mintzberg and Waters 1985	Hart 1992	Dess, Lumpkin and Covin, 1997	Bailey, Johnson and Daniels 2000	Bowd 2003	Collier, Fishwick and Floyd, (2004)
Change	System bureaucracy	Plan	Rational	Participative	Planning	Rational	Planning
Collaborative	Managerial autocracy	Process	Command	Entrepreneurial	Command	Command/ Autocratic	Command
Commander	Adaptive planning	Entrepreneurial	Symbolic		Culture		Vision
Cultural	Political expediency	Ideology	Transactive	Adaptive	Incremental	Participative / Aligned	Culture
Crescive		Umbrella	Generative	Simplistic	Political	Generative	Adaptability
		Consensus			Enforced choice		Internal politics
		Imposed					Business constraints
							Non-business constraints

Table 5 – Integrated models of strategic development compared (adapted from Balabanis and Spyropoulou 2007)

A summary of key studies relating to the development of an integrated model of strategy development is shown in Table 6.

Authors	Study	Modes or dimensions	
Bourgeois and Brodin 1984	Authors review previous research to propose five approaches to the implementation of strategy in organisations. All the approaches apart from Crescive focus on strategy coming from the chief executive or Top team.	Commander Change Cultural	Collaborative Crescive
Shrivastava and Grant 1985	Through an empirical study of the strategic decision making in 31 companies in India the authors identify four styles of strategy development.	Managerial autocracy Systemic bureaucracy	Adaptive planning Political expediency
Mintzberg and Waters 1985	Authors draw on case studies of single organisations to propose 8 different styles of strategy on a one dimension continuum of strategy-making from deliberate to emergent. They define 8 styles.	Entrepreneurial Plan Ideological Umbrella	Process Unrelated Consensus Imposed
Hart and Banbury 1994	Authors apply framework of five 'modes' based on two dimensions: the degree of top management intentionality and organisational actor autonomy. This focuses on the varying roles of top management and organisational members in the strategy-making process. In a study of 720 chief executives from US Midwest they confirm the framework and find that organisations need capabilities across all five modes. Firms using multiple modes outperform those using a single mode. While this model extends the ideas of Mintzberg and Waters (1985) through the consideration of organisational actor autonomy, it is less comprehensive than the earlier work in not including the idea of strategy being 'imposed' by the environment.	Command Rational Symbolic	Transactive Generative
Bailey and Johnson 1996	Building on a review of studies of strategy development the authors propose and test a model of strategy development based on 6 dimensions which extend the scale of Hart (1992) by not assuming managerial discretion. In a survey of 686 managers from 122 private and public sector organisations they found 12.3% had processes characterised by only 1 dimension and conclude that the dimensions combine into distinct configurations.	Command Planning Incremental	Political Cultural Enforced choice
Dess, Lumpkin and Covin 1997	Using an adaptation of the scale used by Hart and Banbury 2004, with executives from 32 US firms. Found Entrepreneurial orientation can be viewed as a strategy-making process in organisations.	Participative Entrepreneurial	Adaptive Simplistic
Bowd 2003 DBA	In DBA research the author applies the Hart and Banbury (1994) scale with middle managers in Canada. The study fails to reproduce the modes found in the earlier work and concludes that the scale may be affected by situational factors.	Command Rational Autocratic	Participative/ Aligned Generative
Collier, Fishwick and Floyd 2004	Uses Bailey and Johnson (1996) scale with minor changes. Survey of 6394 managers from 601 private and public sector organisations over 6 years. Study refines original model of Bailey and Johnson 1996 splitting two of the dimensions.	Planning Command Vision Culture Adaptability Internal politics	Non-business constraints Business constraints

Table 6 - Key studies in the development of integrated models of strategy development

2.5.3 Strategy development profiles (SDP)

The six dimensions could combine in an infinite number of ways but Bailey and Johnson (1995) propose that there are recognisable patterns (or profiles) influenced by the type of organisation and its environment. The strategic development profile (SDP) can be described using the

diagram shown in Figure 8. This shows the extent to which each of the dimensions is present in the way strategy develops in an organisation.

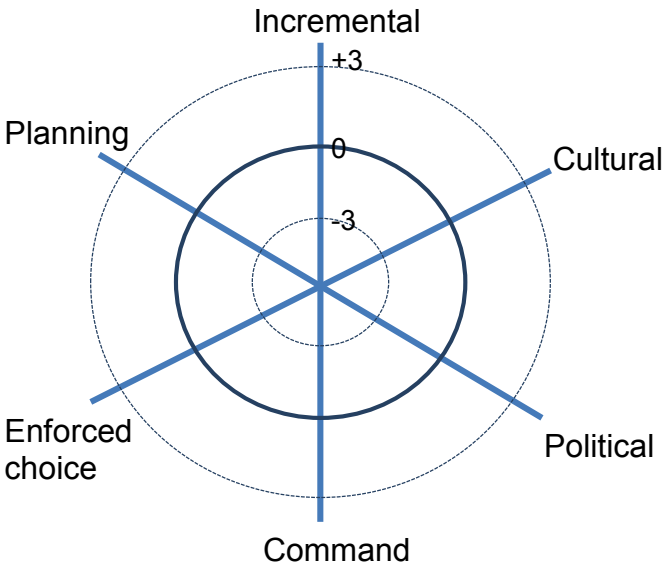


Figure 8 – Strategy development profile (Bailey et al., 2000)

The middle (solid) ring of the diagram represents the mean of the responses of individuals sampled. For each dimension, a position outside this ring (i.e. a positive score) represents the extent to which this dimension is characteristic of the strategic development processes of the organisation. Conversely a position inside the ring suggests that the dimension is uncharacteristic of strategy development in the organisation.

Using a sample of 686 middle and senior managers from 122 public and private sector organisations, Bailey and Johnson (1995) find that the strategy development profiles cluster in to six distinct configurations. They describe these as:

Planning where only the *planning* dimension is evident. This is found in only three organisations in the study – all large organisations in the service sector working in stable but competitive environments.

Logical Incremental where the *planning* and *incremental* dimensions are combined. These organisations are characterised by growth, stability, maturity and more benign markets.

Rational Command where the *planning* and *command* dimensions are combined. This is common and found in large manufacturing organisations represented in the study.

Muddling through where *cultural*, *political* and *incremental* dimensions are prominent, but not *planning*. This is found particularly in professional service firms.

Externally dependent where *political* and *enforced choice* are combined. This is also common in the sample used and seen in public sector and larger manufacturing organisations. Figure 9 shows an example of this profile.

Embattled Command where *cultural*, *political*, *command* and *enforced choice* are present. This is seen in organisations in unstable environments and declining markets.

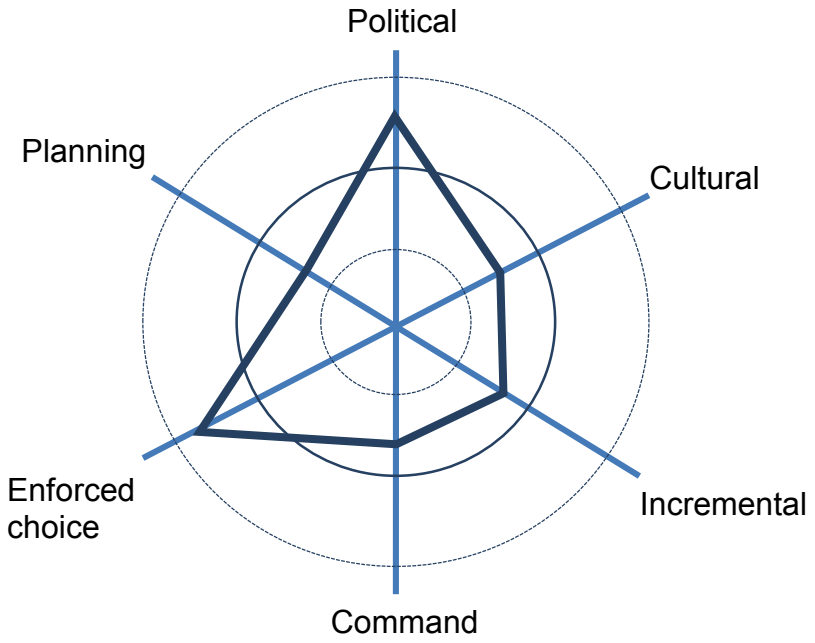


Figure 9 – Externally dependent profile (adapted from Bailey et al. 1995 p.5)

Bailey and Johnson identify SDP which are common in particular industries, but these do not say anything about the variation of SDP in organisations in the same industry. The authors propose the need for more work to examine more the contingent factors. The relationship between the strategy development dimensions and organisation performance is considered in the next section.

2.5.4 Strategic planning and its impact on organisations

Studies exploring the link between strategy development and organisation performance have historically focused on the impact of strategic planning. Early studies such as Pearce et al. (1987) are criticised for methodological weaknesses (Miller and Cardinal, 1994). The conclusions of Brews and Purohit (2007 p.67) about the importance of the construct "*measurement and appropriate controls"* highlight the complexity of the relationship between strategy process, strategy content and organisation performance. This is supported by Andrews et al. (2009) in their study of Welsh local authorities. They conclude that a *"more nuanced"* (p.14) model of strategy development is necessary to understand the relationship with performance. The work of Hart (1991; 1992) and Bailey et al. (1995; 2000) described earlier in this chapter, provide a fine-grained model of the strategy development process which partly satisfies this demand. However the relationship between the strategy development dimensions and organisation performance remains unclear. This section will consider other work to explain this complex link.

2.5.4.1 The complexity of the process-performance relationship

The study of Hart (1991) reviewed in section 2.5.2, suggests that working in all four of the strategy-making modes links to higher organisation performance measured as a combination of quality, profit and growth. When considered individually, no relationship is identified between performance and the *rational* or *generative* modes. There is significant correlation between performance and the *symbolic* mode (r = .21 - .33) and the *transactive* mode (r = .08 - .25). Looking at firms using combinations of the modes the highest performance is associated with firms using all four. The study is limited in using single respondents and subjective assessment of performance. However, Hart's findings support the view that to be effective, strategy making needs a mix of approaches.

However, this finding is not replicated in the later study of Hart and Banbury (1994) using a more detailed measure of performance including profit, growth, future position, quality and social responsiveness. Here they find that only the *rational* mode is associated with all the measures of higher performance (r = .12 - .24). They conclude that the relationship is influenced by the size of the organisation and the turbulence of the environment. For larger organisations (>50 personnel), working in all five modes is associated with higher organisation performance, apart from measures of profit (r = .15 - .33). Working in only one or two modes is associated with lower organisation performance, apart from measures of profit and growth (r = -.22 - -.13). However for very small organisations (<8 personnel) and firms working in turbulent

environments, higher performance links with capability in both single and multiple modes. These findings do not support the conclusions of Hart (1991) and suggest that any relationship between the strategy-making modes and organisation performance is influenced by other factors. The authors call for further study on the moderating effect of contingent factors to understand more the complexity of how combinations of strategic development processes link to organisation performance.

Brews and Purohit (2007) use Hart's framework to study the link between strategic planning and environmental instability in a study of 886 private sector firms spread over 19 industries. The study uses a single measure of performance including profit, share price, and overall perceptions of performance relative to competitors. Their findings do not support Hart (1991) in that they find a positive relationship between g*enerative*, *transactive* and *rational* planning and organisation performance, but a small negative link with *symbolic* planning (β = -.08). While the study concludes that *generative* and *transactive* planning is more common in unstable environments and *symbolic* and *rational* planning is more commonly found in larger firms, but how this may influence the relationship with performance is not considered. Brews and Purohit conclude that overall, the combination of approaches has a small but significant positive impact on performance (R^2 = .11).

Bailey et al. (2000) use a single composite measure of performance including profit, market share, growth and rate of market share increase. Using a survey of 5,332 managers in 937 organisations split between the private and public sectors they identify links between the dimensions and organisation performance. Small but significant positive correlations are found between organisation performance and high scores for the *planning* and *incremental* dimensions (r = .19 and .15). Negative correlations are found between performance and the *political* or *enforced* choice dimensions (r = -.21 and -.39). The study does not consider the impact of combinations of dimensions nor the action of organisational and environmental effects, and the authors suggest that more testing is necessary.

These studies highlight the complexity of the relationship between strategy development and organisation performance. Not all dimensions of strategy development are associated with all measures of performance. While working in a combination of modes or dimensions can have performance benefits, they are influenced by environmental and organisational factors and the

impact of different combinations remains unclear. However, recent studies outlined in the next sub-section suggest how organisational factors may influence the relationship.

2.5.4.2 Organisational factors

Rudd et al. (2008) criticise the traditional bi-variate nature of studies in this area and propose that the link between strategic planning and performance is indirect and mediated by organisational factors. Using a survey of 366 top managers in medium/large UK manufacturing organisations, they conclude that organisational flexibility acts as a mediator in the link. They describe flexibility as the extent to which "*new and alternative decisions are generated and considered*" (2008 p. 99) and identify four different types of organisational flexibility. The first is operational flexibility which relates to the firm's ability to adjust its product mix or production capacity. Second is financial flexibility relating to the firm's ability to rapidly secure and deploy financial resources. Third is structural flexibility concerning how easily the firm can restructure. Fourth is technological flexibility which relates to how easily the firm can adjust its technological capability.

Ouakouak and Ouedrago (2013) support the findings of Rudd et al (2008) by demonstrating the link between strategic planning and organisational performance is mediated by strategic alignment. Strategic alignment is measured by a combination of employee's knowledge of the organisation's strategy and the extent to which they contribute to its realisation. The study surveys the views of senior managers in 372 companies from 33 European countries. The authors conclude that employee strategic alignment fully mediates the link between formal strategic planning and both financial and non-financial performance.

Ouakouak and Ouedrago's (2013) research supports the idea of organisational activity mediating the impact of strategy development processes. However, it does not explain what aspects of the strategy development process impact on employees. Specifically in the case of Rudd et al. (2008) it does not suggest what aspects of strategic planning encourage middle manager flexible working. This suggests the need for more understanding of how strategic planning processes impact on the activities of the people involved.

Collier, Fishwick and Floyd (2004) adapt the Bailey and Johnson (1995) six dimension model (as discussed above) to test for a relationship with 'active involvement' of the manager in the strategy development process. Using the same database as Bailey, Johnson and Daniels (2000) they find that greater involvement of middle managers in the strategy development process

relates to perceptions of greater rationality and adaptability in the process. Respondents reporting lower 'active involvement' perceive the process as more top down and more affected by political and cultural influences. The authors do not draw conclusions about the causality of any link.

Barton and Ambrosini (2010) also use the Bailey and Johnson *planning* scale to gauge how exhaustive and comprehensive middle managers perceive the strategy formulation process of their organisation to be. The study looks at the organisational antecedents of the effectiveness of strategic planning processes. It does not find support for the hypothesis that the perceived effectiveness of the planning process is increased by middle manager involvement in decision making or the degree of support shown by top management. This challenges the findings of both Floyd and Wooldridge (1992) and Mantere (2008). The authors do find support for the effectiveness of strategy formulation being linked to availability of information and the degree to which the process is controlled.

Research into how strategies develop in organisations has progressively exposed its complexity. Exploring this has led to an increased focus on the activities of the individuals in the process. The dimensions of Bailey and Johnson (1995) answer the call of Andrews et al. (2009) for a more nuanced model of strategic development. However, the way in which the dimensions influence the activity of middle managers is not yet explored. Additionally, despite Bailey and Johnson (1995) identifying a link between the SDP of an organisation and its external environment, the nature of this is not fully understood.

Having considered the three main theoretical areas included in this study, the next section reviews an important aspect of the public sector context of the research and considers the measurement of organisation performance.

2.6 Organisation performance

In a review of strategy research Venkatraman and Ramanujam (1986) argue that business performance is central to strategic management. However, they note that *"the treatment of performance in research settings is perhaps one of the thorniest confronting the academic researcher*" (p. 801). This is because of the variety of measures used and different ways that data are gathered.

Studies into the link between strategic management practices and organisation performance require a measure of performance which has validity and reliability. The measure needs to reflect accurately what the organisation studied is trying to achieve. It also needs to be clearly defined and replicable, where necessary allowing comparison across organisation boundaries (Macpherson, 2001).

2.6.1 Measurement of performance in strategy research

Early studies considering strategy in profit-making organisations focus primarily on financial performance data (Pearce et al., 1987; Boyne and Gould-Williams, 2003). However, Venkatraman and Ramanujan (1986) criticise this arguing that these measures represent a too narrow view of organisation performance. They argue that performance is multi-dimensional and propose the use of a mixture of financial (e.g. sales growth, profitability) and business results (e.g. market share, product quality). This not only offers a broader view of organisation performance, it also allows understanding of the factors leading to the financial performance. The authors suggest data should be drawn from both internal and external sources as an alignment of these would offer strong support for the validity and reliability of the performance construct.

Hart and Banbury (1994) support the need for a multi-dimensional view of performance in a study of the link between modes of strategy development and organisation performance. They conclude that an organisational capability to work in more than one mode links to improved competitive position, growth and quality, but not to current profitability. While the finding is not discussed in the study, it may suggest that strategy development approaches particularly influence longer term measures of performance.

Miller and Cardinal (1994) also support the view that a multi-dimensional measure of performance is necessary. Following a meta-study into research on the link between strategic planning and organisation performance, they conclude that environmental turbulence impacts on the link between planning and profitability but not on the link between planning and growth. Additionally, they find that industry type affects the link between planning and growth but not planning and profitability. These findings suggest that the different dimensions of performance are influenced differently by some aspects of strategic planning.

Rudd et al. (2008) consider both financial and non-financial (employee satisfaction and retention) internal measures of performance in their study of how organisation flexibility

mediates the effect of strategic planning. They conclude that financial performance (as measured by the growth of profit, sales and market share) and non-financial performance are mediated by different types of organisation flexibility.

The results of these studies suggest that a multi-dimensional measure of organisation performance, including both internal and external measures, is necessary to capture the complex impact of strategic activity in an organisation.

2.6.2 Perceptual and archival measures of performance

Perceptual assessment of performance, where the measure is based on the manager's or other stakeholder's perception, is common in private sector studies of strategy in the past 20 years. In a review of previous studies, Brews and Hunt (1999) find both perceptual and archival measures of performance used with no one set of criteria predominating. They conclude that, in a multi-industry study, objective measures of financial and business performance are not possible because of variation in performance norms and reporting practices. Ghobadian et al. (2008) also use internal perceptual data in a study of strategic planning in UK SMEs. They argue that this is preferable because firms are reluctant to divulge financial information and non-financial data is rarely collected.

Greenley and Foxall (1997) note this trend in the use of perceptual data and draw on a wide range of research showing high consistency between perceptions and more objective measures (for example Dess and Robinson Jr, 1984). Wall et al. (2004) specifically consider the validity of the use of subjective measures of company performance in three separate studies. They conclude that sometimes other sources of data are not available and find perceptual data can be as valid as more objective archival data. However, they recommend that *"wherever possible, investigators should use both subjective and objective measures of performance within studies".* (p.116) As each type of measure will contain error more reliable estimates of performance are gained from using both in combination.

Perceptual performance data are used in the two series of studies which form the basis of the current research. In work looking at the impact of middle manager strategic activity, Floyd and Wooldridge (1990; 1992) measure organisation performance using the perceptions of chief executives in relation to the competitive position, return on assets, efficiency, financial performance and growth. The study combines the measures into a single index.

Bailey at al. (2000) use perceptual measures of financial (profitability) and non-financial (market share) performance in a study involving both private and public sector organisations. They also combine the scores into a single index and argue that the measures are valid for some, but not all, public sector organisations. In not considering the dimensionality of performance, these studies may mask any relationships between the different dimensions, a weakness which the current research avoids.

Table 7 summarises the organisation performance measures used in the key empirical strategy studies drawn on for this research. This shows that since 1990, internal, perceptual measures of organisation performance have predominated in strategy research. However, the recent studies focusing on the public sector have increasingly used external archival data because of the particular issues associated with the measurement of public sector performance. These will be considered in chapter 4.

Authors	**Purpose of study**	**Sector**	**Perceptual/ archival**	**Internal/ external**
Floyd and Wooldridge 1990	The link between middle manager strategic activity and organisation performance	Private	Perceptual	Internal
Floyd and Wooldridge 1992	The link between middle manager strategic activity and strategy followed	Private	Perceptual	Internal
Dess et al. 1997	Evaluating the entrepreneurial strategy-making construct	Private	Mixed	Internal
Brews and Hunt 1999	The link between environmental factors and style of planning	Private	Perceptual	Internal
Bailey et al. 2000	The link between Strategy Development Profile and Organisation performance	Mixed	Perceptual	Internal
Andersen 2000	The link between strategic planning, autonomous activity and organisation performance	Private	Perceptual	Internal
Boyne and Gould-Williams 2003	The link between strategic planning and performance	Public	Perceptual	Internal
Andersen 2004	The link between strategic planning, decentralised systems and organisation performance	Private	Perceptual	Internal
Andrews et al. 2005	The link between representativeness of workforce and organisation performance	Public	Archival	External
Andrews et al. 2006	The link between strategic content and organisation performance	Public	Archival	External
Meier et al. 2007	The link between strategic management and performance	Public	Archival	External
Brews and Purohit 2007	The link between strategic planning and environmental instability	Private	Perceptual	Internal

Ghobadian et al. 2008	The link between strategic planning and organisation performance in SMEs	Private	Perceptual	Internal
Rudd et al. 2008	The mediating effect of flexibility on the link between strategic planning and organisation performance	Private	Perceptual	Internal
Andrews et al. 2009	The link between strategic formulation, strategy content and organisation performance	Public	Archival	Mixed

Table 7 - Organisation performance measures used in key empirical strategy studies

The current study will need to draw on these findings in three ways. First, it stresses a need to use a mixture of internal and external measures to ensure a wide range of organisation performance. Second, it is necessary to use a range of perceptual and archival measures to minimise the weakness of each group. Third, the multi-dimensional nature of measures means they cannot be consolidated into an overall single view of organisation performance so that more specific links with individual aspects of performance are revealed.

2.6.3 The public services context and performance measurement

The public sector context affects police forces most notably in terms of organisation performance. Boyne and Walker propose that performance measurement for public sector organisations is more complex because of their role "*to provide services that meet the expectations of citizens and that are efficient, effective and equitable*" (2010 p. 5185). Boyne and Gould-Williams also point to the variety of stakeholders around a public sector organisation as influencing performance measures. They state,

> *"The meaning of good performance in the public sector is an inescapably political issue. Judgements of the relevance and relative importance of different dimensions of organisation success will vary across stakeholder groups. It follows that a test of the impact of planning in the public sector should cover a range of interpretations of performance." (Boyne and Gould-Williams, 2003 p. 120)*

This results in, *"public sector managers trading different dimensions of performance when setting and implementing strategies."* (Boyne and Walker, 2010 p.5190)

A number of studies looking at the impact of strategic management practices on the performance of British local authorities in the last 10 years try to examine the complexity described above. They use perceptual and archival measures to consider a broad range of performance.

The first (Boyne and Gould-Williams, 2003) uses the perceptions of chief executives in relation to service quality, costs, efficiency and cost effectiveness. They use the measure to minimise the influences of variables possibly affecting more objective measures and because there are no centrally collected data which are accepted by all local authorities. However, they question the arguments in favour of the use of subjective assessment of performance made by Dess and Robinson (1984) and others. They suggest that the use of internal perceptual measures may not be valid in the public sector because of the range of stakeholders which impact performance.

A similar study of English local authorities (Andrews et al., 2006) uses the Comprehensive Service Assessment (CPA) data collected by the Audit Commission. The authors propose that this use of external archival data is the *"gold standard"* (p. 378) and avoids weaknesses inherent in perceptual data such as common method bias, reliance on informant's recall, and uncertainty about informant's knowledge. The CPA scores local authorities over a wide range of activities (e.g. education, waste management etc) and uses weighting to give a single index of performance. A later study of Welsh local authorities (Andrews et al., 2009) also uses archival data to consider a combination of 21 of the 100 National Assembly of Wales performance indicators to form a single measure.

This review shows how external archival data can give greater validity and reliability for measures of public sector performance. It also suggests that a range of indicators can be combined to form a single measure of performance for local authorities. However, the validity of a single measure can be questioned. The studies by Boyne and others (Boyne and Gould-Williams, 2003; Boyne and Walker, 2010) conclude that public sector performance should be viewed as multi-dimensional. The approach taken by Andrews et al. (2006; 2009) does not allow examination of the impact of strategic planning on different aspects of performance and may not reveal the more subtle connections found by Miller and Cardinal (1994).

The Office of Public Management suggests that organisation performance in the public sector needs to balance four separate demands. These are shown in Figure 10.

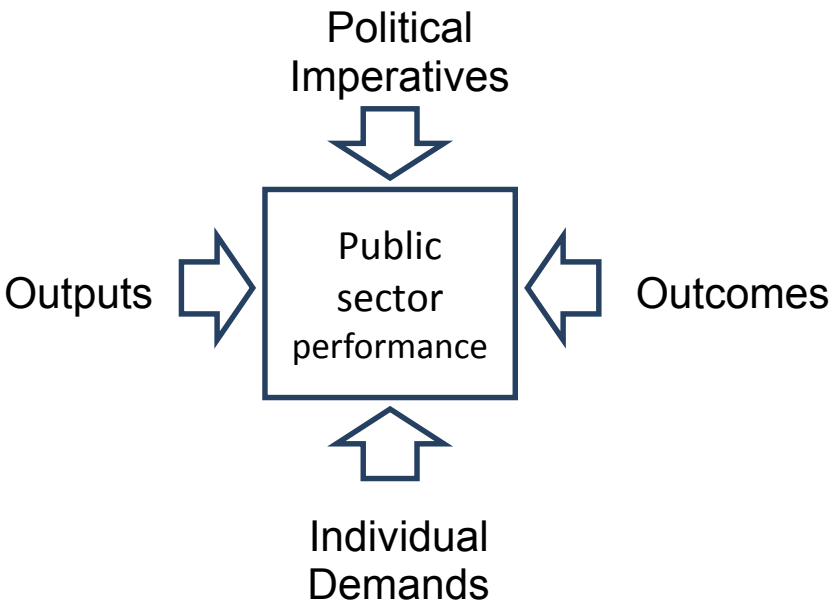


Figure 10 – OPM public sector performance model

The model argues that public sector managers need to balance effort towards government priorities with the expectations of individuals who contact the service. These two demands may conflict. For policing, this tension can be highlighted by on one side, an expectation on the police service to deal with international fraud or terrorism, and on the other by the expectation of a householder complaining that they are being disturbed by a noisy party next door. Additionally, a public sector organisation will be measured in relation to its outputs but also in relation to the outcomes achieved. Again these two measures may conflict. In the context of this study Police forces are measured on the extent to which crime is reduced but also on the percentage of crime solved. These two are accepted as valid despite there being no evidence that solving crime is an effective tactic in relation to reducing crime.

The issues associated with public sector performance measurement reinforce the importance of taking a multi-dimensional approach. However, the nature of policing adds a further level of complexity which is considered in chapter 3.

2.7 Conclusions, research questions and hypotheses

This section draws together the conclusions from section 2.3 to 2.6 and sets out the research questions and hypotheses which are the focus of this study.

The work of Rudd et al. (2008) suggests that the impact of strategic development processes are mediated by organisational factors and in particular by the activities of managers throughout the organisation. Studies also suggest that the activity of managers in the middle of the organisation is important in the development of strategies. The position of middle managers gives them unique insight and knowledge to engage in divergent activity. This raises the possibility that middle manager divergent activity may be a mediating factor in how strategy development processes influence performance.

Wooldridge, Floyd and Schmid (2008) find that the research on the antecedents of middle manager strategic activity is fragmented and that investigation of how the environment influences middle manager strategic activity is particularly limited. This is supported by Currie and Procter (2005) who suggest that the public sector has been neglected and call for work looking at the influence of key stakeholders' expectations of managers. Additionally, previous studies looking at middle manager strategic activity focus more on the behavioural dimension of Floyd and Wooldridge's model (whether the activity is directed at senior managers or at junior staff). More work is needed on the cognitive dimension exploring the antecedents influencing the divergent activity which is important to strategy development.

If effective divergent activity of middle managers is associated with improved organisation performance, an outcome of the strategy development process should be the facilitation and encouragement of this divergent activity. Exploring this needs to consider two related issues. First, it requires a multi-dimensional view of strategy development which considers a comprehensive range of formal and informal processes through which strategy forms. Second, to determine the impact of strategy development processes on middle managers it is necessary to understand the manager's perception of how strategy forms. To do this the study must look behind formal and official processes such as strategic planning to examine the complexity of political and cultural motivations on managers in organisations.

The processual perspective of strategy, in which this study is based, gives the opportunity to examine these areas in detail. It allows a focus on the activities of managers, accepting that those activities are influenced by a range of social and psychological issues. In this way it cuts across several of the descriptive schools of strategy described by Mintzberg and Lampel (1999) to understand more closely the influence of, and influences on, middle managers in the development of strategy. This leads to the three research questions set out in the following sub-section.

2.7.1 Research questions

The importance of middle manager strategic activity to the success of an organisation is established (Wooldridge et al., 2008) but the relationship is not fully understood. In particular, Pappas and Wooldridge propose that divergent activity of middle managers is an important aspect of strategy development (2007) but the antecedents and outcomes of this activity have still to be studied in different environments.

The link between strategy development processes and organisation performance (Brews and Purohit, 2007) is also established, although again the nature of that relationship remains unclear. Shepherd and Rudd (2014) conclude that the relationship is highly dependent on context and Andrews et al. (2009) suggest that understanding the link needs a more nuanced description of strategy development. Rudd et al. (2008) and Ouakouak et al. (2014) suggest that the link is not direct but can be mediated by other organisational factors, but the full nature of these is still not completely explained.

This study adds to the above research by looking at the particular environment of a police force. It examines how the engagement of middle managers in divergent activity is influenced by perceptions of strategy development and stakeholder salience. The following three questions guide the study.

Wooldridge and Floyd (1990) identify that the involvement of middle managers in strategy development improves organisational performance. They find that this is not associated with increased commitment of middle managers. The authors propose that the improvement in performance is due to higher quality of strategic decisions due to middle manager involvement. This involvement can be integrative or divergent (Wooldridge et al., 2008).

Divergent activity is associated with trying new ideas and championing new approaches which Burgelman (1983) suggests is important for the development of strategy. The importance of middle managers having the freedom and flexibility to act with some autonomy and to engage in divergent activity is recognised by Andersen (2000).

Research about the outcomes of middle manager involvement in strategy development however has predominantly focused on large profit-making organisations in dynamic environments. The ideas have yet to be tested in other environments. The finding of Schilit (1987) that middle manager strategic activity is found least in large public sector organisations

raises the question of whether there are factors relevant to the public sector context which constrain such activity. The focus of this study on a single organisational context gives an opportunity to explore the value of middle manager strategic activity through the following question:

1. **How does middle manager divergent activity influence organisation performance in the police service context?**

The stakeholders around an organisation influence the environment in which middle managers make choices about engaging in divergent activity. Some studies (Greenley et al., 2004; Kuratko et al., 2007) conclude that having a range of strong stakeholders can be a drive to entrepreneurial activity as the manager is subject to a wider range of influences. Others have suggested that the wider range of stakeholders can lead to role conflict (Rizzo et al., 1970) which can constrain divergent activity.

Knox and Gruar (2006) argue that not-for-profit organisations have a wider range of stakeholders which leads to them pursuing multiple objectives. This is highlighted by the model of public sector performance being used in this study which includes both government imperatives and the demands of individuals. (Section 2.6) Public sector managers are required to balance these various demands using limited resources. The impact of external stakeholder demands is particularly felt by middle managers responsible for service delivery. An increase in the salience of external stakeholders is therefore likely to bring with it increased demand which will impact on middle manager behaviour. This leads to the following question:

2. **How does stakeholder salience impact on the divergent activity of middle managers?**

Mantere (2008) suggests that top managers set the environment within which middle managers engage in strategic activity. The approach and activities of top managers encourage or constrain middle manager attitudes and behaviour. One of the principal activities of top management is deciding organisational strategy. Middle managers' perceptions about how strategic decisions are made and strategies develop in the organisation may therefore influence middle managers' willingness to undertake strategic activity.

Middle manager strategic activity can be integrative or divergent depending on whether it relates to the current strategy or the development of new ideas (Wooldridge et al., 2008). All managers have some scope to decide the extent to which they give their energy to an activity.

This can be particularly true of divergent activity which is associated with new and different ways of working. Therefore the level of middle manager divergent activity may be particularly sensitive to the environment created in the organisation.

Andersen (2000) finds no link between formal strategic planning and middle managers being more autonomous in their working. Bowd (2003) explores the connection between strategic planning mode (Hart and Banbury, 1994) and middle manager strategic activity and concludes that it is "*complex*". The current study explores this link by focusing solely on divergent strategic activity using the work of Bailey et al. (2000) which offers a more comprehensive view of strategy development to investigate the final question:

3. **How does the strategy development profile of an organisation influence the divergent activity of middle managers?**

Having set out the questions directing the study, the following section details the conceptual framework and hypotheses which are used to explore these three questions.

2.7.2 Research model and hypotheses

Figure 11 suggests that middle manager divergent activity is associated with organisation performance. The level of divergent activity will be associated with the manager's view of their strategic influence within the organisation. This view of personal influence will be linked to the strategy development processes at work in the organisation and the salience of stakeholders. This section explains the four hypotheses based on this framework.

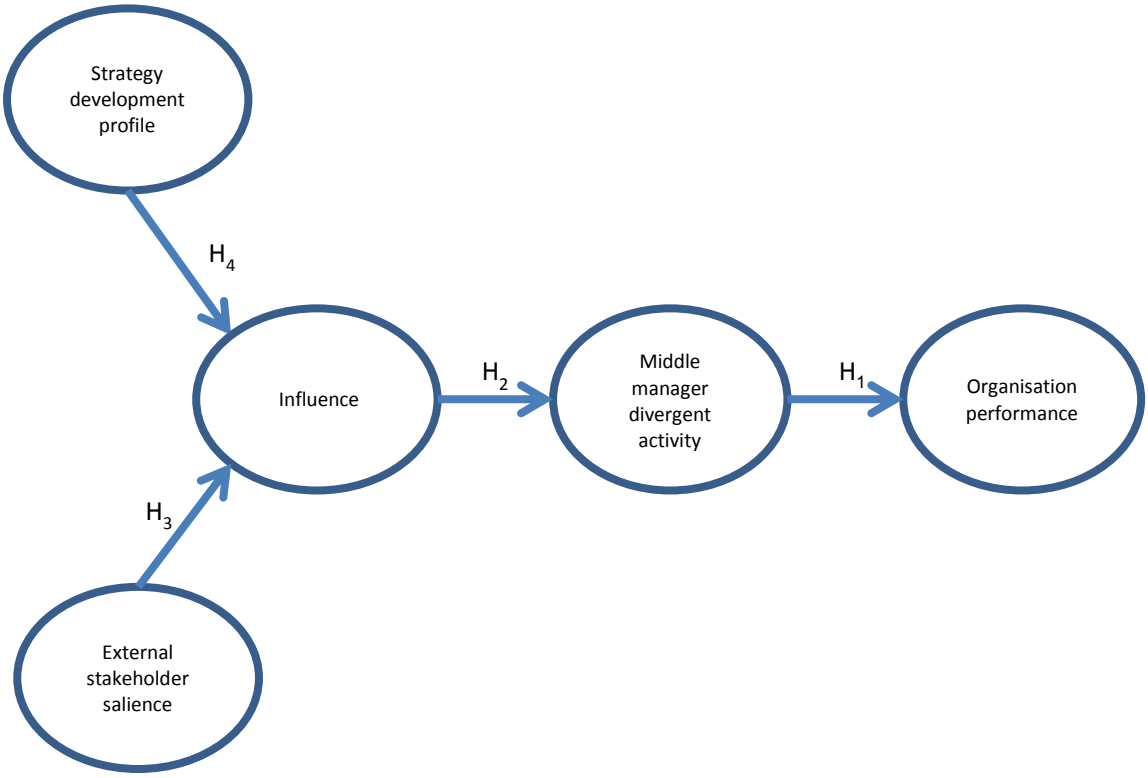


Figure 11 – Conceptual research model showing hypotheses

Section 2.3 highlights the importance of middle managers' involvement in developing and implementing strategy. Middle managers make a significant number of decisions about the use of resources in organisations. These decisions can in due course be adopted and form part of the planned strategy. New strategy can therefore develop though a process of experimentation and selection (Burgelman, 1983).

The importance of divergent activity is supported by Lovas and Ghoshal (2000) in their case study of General Electric. They conclude that autonomous, as well as induced, initiatives in an organisation are important for long-term success. Grant (2003) also supports this conclusion about the role of semi-autonomous behaviour of middle managers in developing strategy in his ideas about 'guided evolution'. Divergent activity of middle managers can lead to better information and ideas from managers with particular insight into the strategic issues of the organisation. These are then fed into the strategy development process

> ***Hypothesis 1: The higher the level of middle manager divergent activity, the higher the higher the level of organisation performance.***

Currie and Proctor (2005) and others find that the strategic influence of middle managers is predominantly through the integrative activity of implementing deliberate strategies. This can be seen as a 'primary activity' (Floyd and Lane, 2000) of middle managers. In contrast to integrative activity, divergent activity which challenges the dominant paradigm of the organisation (Floyd and Wooldridge, 1992) is a 'secondary activity'. Furthermore it is an activity which carries risk for the individual manager. Many senior managers will have achieved their position through support of the existing paradigm and may see challenge as a threat. Additionally, new ideas sometimes fail which, depending on the culture of the organisation, can reflect poorly on the person championing the idea. The extra work and risk attached to divergent activity suggests that managers will need good reason before engaging with it.

Previous researchers (for example Bowd, 2003) find that the link between organisational factors such as strategy development processes and middle manager divergent activity is unclear. Bowd suggests that the perception of the middle manager may be a factor in explaining this.

The ability to influence strategy, and therefore ultimately their own work, is an attractive prospect for many managers. Where a middle manager perceives that they have influence over the strategy of their organisation, they will be more motivated to play a part in strategic activity, even in the face of factors which would normally constrain them. If the manager believes that they have little influence, they will be less motivated to engage in risky divergent activity notwithstanding organisational factors which may encourage them.

Hypothesis 2: The higher the level of influence, the higher the level of middle manager divergent activity.

Currie and Procter (2005) find that government policies can increase role conflict for public sector managers. Greenley et al. (2004) also find that managers' perception of stakeholders can negatively influence the degree of learning and innovation in strategic processes. This suggests external stakeholders impact on the behaviour of managers.

Managers faced with competing demands and expectations due to lack of time or resources, or their inability to prioritise, can experience role conflict and ambiguity (Rizzo et al., 1970; Floyd and Lane, 2000). If the level of role conflict and ambiguity increases, managers' perceptions of their ability to influence the organisation will be affected. In consequence managers can be expected to try to avoid or minimise the associated stress by reducing or simplifying demands and expectations on them.

Stakeholder salience (Mitchell et al., 1997) is formed by a combination of the stakeholder's power, legitimacy and the urgency of their demands. If a manager views a stakeholder as having high salience, the stakeholder is seen as having the ability to impact on that manager's work. Stakeholders within the organisation who are seen as having high salience will generally include top management. A manager can potentially influence top management by championing ideas. If the stakeholder is outside the organisation, a manager has less chance to influence them. The stronger the salience of stakeholders external to the organisation, the less influence a middle manager may perceive.

Hypothesis 3: The higher the level of external stakeholder salience, the lower the level of influence.

Rudd et al. (2008) suggest that the difficulty in establishing the link between strategic planning and organisation performance is because it is not direct. This supports the arguments of writers such as Kaplan and Beinhocker (2003) who argue that the value of strategic planning is not in the production of plans but its role as a learning process for managers. In this way the contribution of the strategy development profile to organisation performance is in how it impacts on the perceptions and activities of managers.

Strategic planning processes, which have a basis in rational decision making and evidence, will give a level of confidence to middle managers that new ideas will be received and dealt with objectively by top management. Through this their perception of the ability to influence organisational strategy will be enhanced. Conversely, where managers see that strategy is imposed, leaving an organisation with little flexibility, perception of ability to influence will be suppressed. This can happen through external forces or through autocratic behaviour inside the organisation. Similarly, a perception of lower Influence can be the result of excessively constraining regulations in the organisation's environment. Currie and Proctor (2005) find that the power of UK government over the strategy of an NHS Trust was seen as a constraint by NHS middle managers.

Hypothesis 4: The strategy development profile of an organization will impact on influence.

2.8 Summary

This chapter shows the importance of middle managers' activity to organisational strategy and the need to better understand the antecedents and impact of this activity. In particular, the reasons why middle managers engage in divergent activity which challenges the dominant logic of the organisation is not fully understood.

Within organisations, the link between strategy development processes and middle manager activity is a key link in understanding the contribution of middle managers, but it is not fully researched. Successive writers have highlighted the need to use a detailed view of strategy development which more fully describes the complexity of the process.

Externally the impact of stakeholders on middle managers is relatively unexplored. Studies have found that the influence of external stakeholders can both constrain or assist the divergent activity of managers.

The chapter brings these findings together through a research model and hypotheses which focus the study. It is now necessary to look at the research methodology which supports the study and the way that this is put it practice. This is considered in the next chapter.

Chapter 3 Research Design and Methodology

This chapter describes the design of the research to test and explore the hypotheses set out in chapter 2. The research design is important for two reasons. First, it guides the way that data are gathered and evaluated to ensure the research questions are answered effectively. Second, it influences in part the extent to which stakeholders accept the conclusions of the study.

Section 3.1 discusses the philosophy underpinning the research and how this guides the design. It sets out the reasons why the current study is based in a Realist ontology. Section 3.2 then explains how the study is designed and why a case study approach, bringing together both quantitative and qualitative data, is appropriate and fits the ontological basis. Section 3.3 details how the constructs in the conceptual framework described in chapter 2 are operationalised and interviews are carried out to ensure the quality of the data gathered. Section 3.4 describes and justifies the analytical techniques used. Section 3.5 describes the results of piloting the data collection in the policing context. This confirms the validity of the overall approach and results in changes and adaptation of the instrument which is used in the main survey.

3.1 Philosophy and approach

This section reviews the ideas underpinning the research methodology. All research involves expressed or implied decisions about the development of knowledge and the nature of that knowledge. Guba and Lincoln (1994) see these decisions as the basic belief system that guides the work, and the understanding of its results. The choice of methodology for any research is influenced by three factors (Cresswell, 2009). First, the study is guided by the assumptions and personal paradigms of the researcher. Second, the design should support the purpose of the research and the method most appropriate to answer the research questions. Third, it should enable the research to build on, and contribute to, similar work so that the findings are convincing to stakeholders. The following sections discuss the methodological choices for a researcher and explain how the three factors above lead to the chosen case study design using both quantitative and qualitative data.

3.1.1 Methodological choices

Ontological debates about reality divide philosophical views into two broad positions often referred to as objectivism and constructionism (Bryman and Bell, 2011). Objectivists believe that there is a reality which is external and independent of the human mind. Constructionists take an alternative view that the only reality is that constructed by individuals. Objectivism is based in the realist natural sciences paradigm which sees scientific laws existing which are independent of the observer.

However, even in natural sciences, what constitutes knowledge can be hotly debated and can be influenced by political and social structures. In social science, the phenomena studied are mental constructs rather than the hard facts of some natural science. Knowledge of reality is seen through the lens of the observer's own experiences and paradigms using senses which can be misleading. However, these relativist (Latour and Woolgar, 1979) challenges to an objectivist paradigm can be viewed as just the human face of more fundamental truths and it is still possible to approach social science research from a broadly objectivist point of view.

In gathering data, a fundamental choice for business researchers is between postpositivist and phenomenological approaches (Remenyi et al., 1998). Postpositivists come from an objectivist philosophical view and draw on the traditions of natural science research. While accepting that absolute truth is not possible, postpositivists use deductive methods to look for transferable conclusions. In contrast, phenomenological or interpretivist approaches predominantly use inductive methods to understand more fully individual situations, rather than look for findings with more general application. The epistemological debates between postpositivist and Interpretivist approaches are often at the heart of the distinction between using quantitative and qualitative research methods. Some writers argue that these methods and philosophies are not inherently linked (Hanson et al., 2005) or see the distinction between the methods as *"no longer useful or even* […] *false"* (Bryman, 2008 p.21). Despite this, qualitative and qualitative methods represent the principle choice for researchers, as is often reflected in the structure of text books and business school programmes.

Supporters of a postpositivist approach argue for the merits of objectivity and detachment and that research can be conducted in a way which is value free (Bryman and Bell, 2011). The traditions of this approach are well established.

> *"Scientific methodology needs to be seen for what it truly is, a way of preventing me from deceiving myself in regard to my creatively formed subjective hunches which have developed out of the relationship between me and my material."* (Raimond, 1993 p.93)

Alternatively, proponents of an interpretivist approach question the idea that the researcher can ever be truly objective and hold that postpositivism denies the subjectivism of individuals.

Mintzberg, for example, argues that the knowledge needed to build theories can only be found in qualitative research.

> *"We uncover all kinds of relationships in our 'hard' data but it is only through the use of this 'soft' data that we are able to 'explain' them, and explanation is, of course, the purpose of research. I believe that the researcher who never goes near the water, who collects quantitative data from a distance without anecdote to support them, will always have difficulty explaining interesting relationships."*
> (Mintzberg, 1979 p.113)

However, although this view is broadly accepted (for example see Raman, 2009) even proponents of qualitative methods have suggested that at its worst, qualitative research can result in complex, narrow and idiosyncratic theory that is not generalisable (Eisenhardt, 1989).

Cresswell (2009) proposes that the use of both quantitative and qualitative methods can benefit from perspectives of both approaches. The growth of mixed methods designs accepts that all methods have limitations and combining them can minimise the weaknesses of both. Hanson et al. (2005) suggest that this allows a better, and broader, understanding of the phenomena studied and "*enrich*[es] *results in ways one form of data does not allow."* (p 224). Brannen (2005) supports Cresswell's argument about the value of mixed methods in sociological research and suggests there are pressures to bring the two approaches together, particularly where practical contributions are looked for. He proposes that the two types of data can be combined to corroborate, elaborate, complement or contradict each other.

3.1.2 Position of the researcher

Every researcher brings to a study their experience, paradigms, hopes and aspirations for the research. The researcher in this study has a background in the natural sciences which predisposes him to a realist, postpositivist view of the world. The study is therefore based on

the view that there are phenomena to be found which help understanding of middle managers in police forces. The ways in which the researcher has designed the collection and analysis of the data to minimise or make explicit his own influence is discussed in the relevant sections of this chapter.

3.1.3 The research questions

The purpose of the study is to make a practical contribution to thinking about management in the police service. Quantitative results are found to be more influential on public sector policy makers than qualitative studies (Wright et al., 2004; Easterby-Smith et al., 2008). Section 2.7.1 sets out the research questions which guide this study. This research explores the relationships between variables which are well established in the previous work discussed in chapter 2. This allows an approach based in a postpositivist philosophy which fits the natural position of the researcher.

The particular context of the research has not been previously studied and purely quantitative data may not be sufficient for the results to be understood. The processual perspective (Whittington, 2002) underpinning this research acknowledges that strategy-making in any organisation is complex. Understanding it requires a focus on the actions of the individuals involved. These actions are influenced by the individual's own abilities and limitations as well as the context in which they operate. Insight into what actions are carried out can be gained through quantitative data. More complete understanding requires qualitative data which elaborates and expands quantitative findings to gain insight into what the information means for managers.

3.1.4 Building on previous work

Strategy research can be divided into three distinct streams. The predominant stream assesses strategy content. A separate stream examines process, and a final grouping considers how strategies are formed (Sminia, 2009). Research into strategy formation can be divided into two approaches. First, there are variance studies, looking at the relationship between independent variables. Second, there are process studies which look at strategy as a series of events, activities or choices over time leading to an outcome (Sminia, 2009). This thesis builds on variance studies where the use of quantitative methods is well established (for example Andrews et al., 2009) but qualitative approaches are becoming more common. (e.g. Mantere, 2008)

Variance studies have increasingly followed a strategy as practice approach. This focuses on the activities of individuals or groups of actors and looks at *" what people do in relation to strategy and how this is influenced by and influences their organisational and institutional context"* (Johnson et al., 2007 p. 7). This accords with the processualist perspective of strategy (Whittington, 2002) taken by this study. The current study is adding to the strategy as practice work through looking at the activities of individual middle managers in developing strategy.

3.1.4.1 How the current study contributes to a strategy as practice perspective

Strategy as practice focuses on three aspects of the strategy development process. The first is *praxis* which is the interconnection between activity of an actor and the social institution. The second is *practice*s which are the routine types of behaviours through which individuals are able to interact. The third is *practitioners* who are the individuals or groups engaged in strategic activity (Whittington, 2006). Studies following a strategy as practice perspective focus on some aspect of the nexus between praxis, practices and practitioners and its consequences on strategy.

In a review of strategy as practice studies, Jarzabkowski and Spee (2009) identify nine separate domains of focus (p. 74). These depend on the *practitioner* being studied (individual, group, or external to the organisation) and the level of *praxis* (micro, meso or macro). The current research focuses on middle managers as *practitioners* and by studying their actions and perceptions, it looks at the micro level of *praxis*. By looking at the activities of middle managers rather than their formal roles, it allows study of their motivations as strategic practitioners. This adds to the work of Mantere (2005; 2008) in exploring how the practitioner's perception of their environment influences their activities.

It also contributes to three of the '*key questions'* for researching Strategy as Practice set out by Jarzabkowski et al. (2007 p.3). First, "*Who is a strategist?"* Through focusing on *middle manager divergent activity* it adds to understanding of how actors throughout the organisation are involved in strategic activity. Second*, "What do strategists do?"* Floyd and Wooldridge's (1992) model enables a detailed description of the divergent activities of middle managers. Third*, "What does an analysis of strategists and their doings explain?"* The way in which the practitioner's perception of their working environment links to divergent activity adds to knowledge of the influences on this group. Looking at strategic planning, not as an abstract idea, but through how it is perceived helps understanding of how strategic processes influence

organisational actors. It also enables understanding of how the activities of these practitioners affect strategy development in an organisation.

Most strategy as practice research has been guided by a phenomenologist methodology to gathering and interpreting empirical data. This generally leads to the use of more qualitative methods for two reasons. First, because there is little established theory in the areas observed (Mantere, 2008). Second, because the nature of the phenomena studied is *"dynamic, complex, involving intense human interaction, demanding an approach that can capture these features"* (Johnson et al., 2007 p. 52).

The current study however, deals with aspects of the organisational strategic environment where some theory is well established. The organisation studied is large but split into a number of semi-autonomous parts which all share similar internal and external environments. This means that comparisons can be made across a large group of managers performing similar roles in a common context. This allows a relativist methodology to explore issues around practitioners and praxis (Whittington, 2006) which contribute to the strategy as practice perspective while making use of mixed methods data.

The participants in this study can be treated as coming from a single organisation with a particular history, context and culture. This is discussed in chapter 4. The activities and perceptions of the managers studied are closely connected to, and influenced by the organisational context. The study is therefore a case study. It echoes the following definition, *"an empirical inquiry that investigates a contemporary phenomenon* […] *and within its real life context, especially when the boundaries between the phenomenon and the context are not clearly evident*" (Yin, 2009 p. 18).

This section discusses how the study fits the postpositivist assumption of the researcher which is the basis of an established approach in variance strategy studies. However, the focus on the behaviour and perceptions of individual middle managers in a single organisation aligns the study with strategy as practice research. This therefore calls for the consideration of a broader range of data sources to allow deeper understanding of the results (Hanson et al., 2005). The next section considers the design of the study to achieve this.

3.2 Study design

The empirical researcher chooses between two broad approaches to gathering data. The first is a cross-sectional approach where data is gathered from a large population at a point in time. The second is longitudinal research where a smaller number of subjects are studied over a period of time.

This study uses a cross-sectional design for two reasons. First, although a longitudinal approach has the advantage of allowing causality to be explored over time, the constraints of time and cost generally preclude it for a doctoral study. Secondly, there is a history of cross-sectional studies in the strategy research on which the current study builds (for example Rudd et al., 2008).

Section 3.1 discusses how this research is a variance study (Sminia, 2009) looking at the relationship between independent variables. It explains how a quantitative approach fits the methodology underpinning the study and allows the research to analyse the behaviour and perceptions of a large sample of middle managers. This will increase the acceptability of the findings for some stakeholders. This approach establishes the level of middle manager divergent activity, and their perceptions about strategy development. However the relative lack of study of strategic processes in police forces means that more information about the context in which the managers work is necessary to interpret the quantitative results. This context can only be understood through the views of the managers involved. Qualitative data needs to be added to the quantitative to allow a more complete picture to be formed.

Greene et al. (2008) suggest that there are five purposes for combining quantitative and qualitative data in a study. First, the study can look for triangulation through the convergence and corroboration of the different data. Second, it can be for initiation of new perspectives found through paradoxes found and contradictions between the data. Third, it can be for expansion and increasing the scope of the study using different methods on different enquiry components. Fourth, the different data can be complementary where qualitative data are used to elaborate and illustrate quantitative findings. Fifth, the results from one set of data can be used to help development of further questions using different data to increase the validity of the results. In this study, qualitative data is used to help explain the relationships found by the quantitative analysis. This fits the fourth and fifth purposes set out by Greene et al. (2008) as the qualitative data complements and develops the statistical analysis.

Tashakkori and Teddlie (2010) identify four families of mixed-methods research designs. The first two relate to whether the different types of data are gathered in parallel or sequentially. The second two, which are not relevant to this research, are designs where data are converted from one form to the other, or integrated together in a complex iterative way. In the current study, where qualitative data are used to help interpret other results, collection of data in parallel is not possible as the sampling and focus of the qualitative data gathering is guided by the quantitative results. The research is classed as a sequential explanatory study (Cresswell, 2009) where an initial large sample quantitative survey identifies participants and subjects for a smaller qualitative data collect stage.

Figure 12 shows the structure of the data collection and analysis in the study. It shows how the results of the statistical analysis inform semi-structured interviews. The two sets of results are then brought together where the qualitative data is used to explain and interpret the results of the survey.

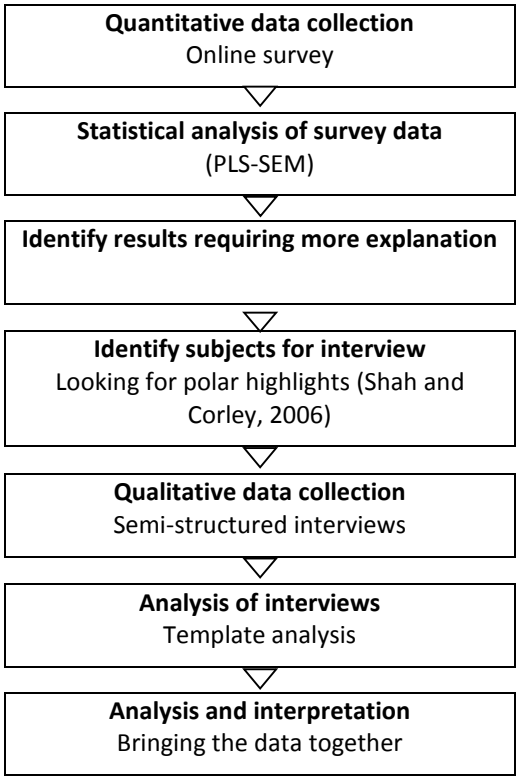


Figure 12 – Structure of the data collection and analysis (adapted from Plano Clark and Cresswell, 2008)

3.2.1 Use of case study

Case studies can have a single focus or compare the results of multiple studies (Yin, 2009). He argues that multiple case studies can have advantages in that they allow the identification of common patterns. Single case studies can be appropriate in certain circumstances. These include where the case is critical in testing theory, revelatory, extreme or unique.

The current research is a single case study and fits Yin's rationale of being a unique case. While all organisations can, to some extent, argue that they are unique, four particular reasons support the argument that the organisation in this study has special aspects which render it unique. First, the organisation is a monopoly provider of a vital public service which it has delivered continuously for almost 200 years. This results in strong traditions and culture which are unique and which influence the work within the organisation. Second, about half of the managers involved hold the Office of Constable. This means that they have legal powers not available to others, and until very recently they could not be dismissed for poor performance, but only for breaches of a discipline code. Third, the organisations have been subject to significant change in the last 20 years, including changes of regulation, increased accountability for performance, and the election of police and crime commissioners. Fourth, they are different to other organisations using formal strategic planning as a management tool in that they are required to produce strategic plans, by statute. These subjects are further discussed in chapter 4.

To understand properly the actions of the managers in this organisation, they need to be considered within their unique context. A case study approach is therefore necessary to bring together a range of data and interpret it in context. The organisation studied has a large number of managers in the middle levels performing work which is directly comparable because of the organisation's hierarchical bureaucratic structure. This allows a large sample quantitative approach to be used as the primary source of data complemented by interviews to extend and add understanding of the phenomena.

3.2.2 Unit of analysis – middle managers

This study considers the perceptions and activities of middle managers. In order to gather data which are accurate and representative of the group, it is essential to define which individuals are included in the group of middle managers and the approach for sampling from that group. For the purposes of this research, defining who can be seen as 'middle managers' is important to ensure that the study is comparable with other work looking at this group. This sub-section

reviews the ways that researchers define middle manager and identifies the criteria used in this study.

The roles of managers in all organisations are becoming more varied. This leads writers to suggest that a definition of middle manager is "*difficult*" (Pinsonneault and Kraemer, 1997 p.666), "*not possible*" (Bowd, 2003 p.155), or even to argue that the term is no longer relevant (Day, 2011). This view may be valid for organisations with looser and more changeable structures. However, this study focuses on an organisation with a hierarchical structure where levels of authority and influence are comparable and clear. Additionally, the concept of middle managers as an identifiable group in the hierarchy is well understood by respondents.

Despite more than 50 years of studies into middle managers there is no consensus in the research about who should be included in this group. Some researchers do not consider issues of definition. Studies that do provide a definition include those allowing the chief executive to identify middle managers (Floyd and Wooldridge, 1992; Currie and Procter, 2005), those that accept the organisation's definition (Raman, 2009), or those which allow participants to self-select themselves as middle managers (Bowd, 2003). Looking at these studies, a definition based on position in the hierarchy of an organisation is most prevalent.

The organisation studied in this research uses the expression 'middle managers' to distinguish two levels of hierarchy in relation to their training needs. This definition is not used to identify middle managers in this study for two reasons. First, the title is a historic one and has not been reviewed in the light of recent organisational changes where the responsibilities associated with a middle manager position now encompasses the work of a wider range of managers. Second, it is important that the managers studied should have comparable level of responsibility with the subjects of the research on which this study is based. A definition based on the position in the organisation is used in this study. This definition emphasised the requirement highlighted by Floyd and Lane (2000) for a middle manager to be in touch with both the top and bottom levels of the organisation.

3.2.2.1 A definition of middle manager

Likert's (1961) view of middle managers as "*linking pins*" between top management and operational staff leads to definitions based on position in the organisation. Thakur (1998) says that middle managers should be below vice president and two steps above first-line supervisor though he accepts that this will vary between companies. Wooldridge and Floyd (1990) suggest

two to three levels below chief executive and state that the key determinant is that middle managers supervise supervisors and are in turn supervised by others. This idea is also used in a series of research on changes to middle manager roles (Dopson et al., 1992; Dopson and Stewart, 1994). In these studies middle managers are workers below top managers and above first line supervisors, but Dopson et al. also choose this definition as it is the one used by the organisation studied. The same definition is used by Pinsonneault and Kraemer (1997) in a study of the impact of IT on middle managers although their rationale is based on how the manager is required to manage information.

A variation of this approach using the linking-pin principle, but combining it with levels of responsibility, is used by the Floyd and Wooldridge (1992; 1997) whose studies form an important backdrop to this thesis. Drawing on Pugh et al. (1968) they define middle managers as "*organisational members who link the activities of vertical related groups and who are responsible for at least sub-functional workflow, but not the workflow of the organisation as whole*." (Floyd and Wooldridge, 1997 p.472)

Mantere (2008) also uses responsibility as a criterion in a study of 12 European professional service organisations. He defines a middle manager as having responsibility for a topic area on which the strategy has an impact. However, he suggests that this is a particularly broad definition and notes that it includes some middle managers who do not have direct subordinates.

The current study identifies middle managers based on their formal level in the hierarchy of the organisation. It identifies them as managers below executive level and above first line supervisor. This definition is chosen for three reasons: First, the focus of the study is on the extent to which managers champion ideas to the executive and facilitate adaptability of their staff. It is therefore important that the managers participating are able to influence more senior managers and also have the ability to influence more junior staff. This suggests that a definition based on the position in the hierarchy similar to Woodridge and Floyd (1990) and Dopson et al. (1992) is most appropriate. Second, the organisations which form the focus of this research are highly structured and use formal ranks or grades which are the primary indicators of authority, pay and influence. This means that the level of authority of people of the similar rank will be comparable across the organisation. Third, this approach is most straightforward to apply to the organisation studied as participants are easy to identify.

By holding middle level positions in an organisation, this group is also knowledgeable about the principles of organisational strategy and the role and activities of middle managers. The following sub-section considers how information is extracted from the group.

3.2.3 Sampling strategy

Over 4,000 managers hold positions which fit the definition of a middle manager in the organisations which are the focus of this study. It is not possible to gather data from all of those managers so sampling is necessary. This study uses two separate samples. First, there is a sample of managers completing the survey. Second, there is a smaller sample of managers, chosen from those participating in the survey, to be interviewed. Two considerations influence decisions about the approach to the sampling. The survey sample needs to be large enough for meaningful statistical analysis. At the same time, both samples need to reflect the range of relevant views of middle managers.

Middle managers in the study are identified by their managerial level in the formal hierarchy (*rank*). However, in addition to *rank*, there are five organisational factors which may influence the strategic activity of these managers. They are:

- the size and nature of work of the individual police force;
- whether the managers are sworn police officers or unsworn police staff;[1]
- the nature of their role;
- their tenure in that role; and
- their experience as a manager in a different organisation.

To ensure that the views of middle managers are honestly reflected, it is important that a range of all of the above factors is included in the samples.

A personal approach by the researcher to all chief constables in England and Wales outside London resulted in 23 who were willing for their managers to participate. The group of managers who took part should therefore be viewed as a purposive and convenience sample. The participation of the individual forces in the study was subject to the agreement of the chief constable and therefore not fully controlled by the researcher. All middle managers in the participating police forces were then invited to complete the survey. This resulted in the

[1] This distinction is further explained in chapter 4

involvement of managers from a full range of police forces and representing different factors above. Full details of the managers participating are in chapter 5.

The sampling strategy chosen in this study contrasts with that used by the researchers validating the two instruments on which the survey is predominantly based. Bailey et al. (2000) use a large sample of both middle and executive level managers attending business school courses. This approach has the advantage of achieving a higher response rate but risks skewing the sample to a group of managers interested in personal development. Floyd and Wooldridge (1992) used MBA researchers working in organisations to distribute the survey as part of a larger project. This achieved a very large response rate but required resources not available in the current study.

As part of the survey, respondents were asked whether they would be willing to take part in a telephone interview to further discuss their responses. Shah and Corley (2006) propose that for a case study of the nature of this research a random sample is not necessary or preferable. They suggest a sample achieving polar highlights to ensure that differing views are fully captured. This approach is taken in this study. From those who expressed willingness, managers were chosen for interview on the basis of their demographic data and responses to the survey. Full details of the sample of managers interviewed are in chapter 5.

3.2.4 Data collection

This study uses data on the activity and perceptions of middle managers. This data could be gathered through survey, interview or observation. Observation is not used in this study for two reasons. First, there are the practical constraints of time available to the researcher and access to the operational working of participants. Second, there are ethical considerations connected with observing the actions of participants providing an often sensitive service to individual members of the public.

The large population of middle managers allows a quantitative approach as the primary source of data. However, as has been previously discussed in this section, this is expanded with a number of semi-structured interviews designed to consider aspects which benefit from greater depth of exploration.

3.2.4.1 Use of surveys

An online self-completion survey is used for four reasons. These are the requirements of the underpinning philosophy, the amount of data required, the history of use of surveys in strategy research, and practical considerations of time and cost.

First, the position of the researcher, and the value of trying to reduce his influence on the data collected is discussed in section 3.1.2. The value of the research rests on gaining honest opinion from the participants. The use of anonymous self-completed surveys means the researcher has no contact with the participant except through written instructions which are common to all participants. In this way the possibility that the researcher's views influence responses is minimised. Additionally, the use of surveys preserves the anonymity of individual respondents and therefore makes it more likely that they will be candid.

Second, the study requires data about activity and perceptions from a large group of respondents in a number of organisations. This makes interviews impractical as the primary source of data within the time and cost constraints on the study.

Third, the use of surveys is well established in the strategy research on which this study is built. In a meta-study of 18 empirical studies of the link between strategic planning and organisational performance, Pearce et al. (1987) find that 17 of the studies used quantitative analysis of data gathered wholly or mainly through mailed questionnaires. Similar approaches are still common. Brews and Purohit's (2007) study of the link between strategic planning and environmental instability uses a methodology common to many of the studies reviewed 20 years previously by Pearce et al. (1987). A similar approach is used by Greenley et al. (2004) researching the connection between strategic planning and stakeholder orientation, and Barton and Ambrosini (2010) in their strategy as practice study of the organisational influences on middle managers.

Fourth, the use of an online survey means that a large number of respondents can be included at minimal cost. Additionally, the researcher is confident that the databases of email addresses which forces used to distribute the survey, comes from the most accurate and complete record of middle managers employed.

Bryman and Bell (2011) point out that the use of surveys can have limitations. First, they can result in low response rates. Second, they do not permit the researcher to probe and collect more information from individual respondents. Third, it is difficult to check the meaning and

interpretation of responses. Proper piloting of the survey and the use of interviews to supplement the survey data offsets some of these weaknesses. This is discussed in the following section. The way in which limitations of the survey are minimised to ensure the validity and reliability of data, is discussed in section 3.3. A copy of the survey is at Appendix A.

3.2.4.2 Use of semi-structured interviews

Data from the survey is supplemented by interviews with middle managers to achieve a *"richer and stronger array of evidence"* (Yin, 2009). Interviews are a well-established data collection method in studies of strategy and Yin refers to them as the most important source of information in case studies. In this study, short interviews are designed to supply data to give further insight into the quantitative data, assisting its evaluation.

Interviews allow the researcher to focus directly on the topics relevant to the case study, and allow the researcher to explore with authoritative respondents the implications of data collected through a survey. Interviews can be structured, semi-structured or unstructured (Bryman and Bell, 2011). This study uses semi-structured interviews as they allow flexibility to gain the interviewee's point of view while maintaining a focus on the research questions guiding the study. Yin (2009) suggests that interviews also have potential weaknesses related to response bias, inaccuracy of recall and interviewees wanting to please the interviewer. The way in which these weaknesses are minimised in the current study is discussed in section 3.3.

The telephone is chosen for the interviews rather than face-to-face for the following reasons. First, telephone interviews can be easy and quick and, in the experience of the researcher, allow a flexibility of arrangement preferred by the managers involved the study. Second, interviewees in the study are spread over a wide geographical area making face-to-face interviews impractical. Telephone interviews therefore give the benefits of interviews discussed above while minimising the cost and time of both interviewer and interviewee. Third, not having the interviewer in the same room may allow the interviewee to be more candid.

Telephone interviews have the limitation that it is not possible to see body-language which may make it easier to misunderstand meaning. Additionally, it is not easy for the interviewer and interviewee to look at written material or pictures such as in a police force strategic plan. These are not important limitations in relation to this study.

This section has considered reasons for choosing a cross-sectional approach to this study. It has established that the group forming the focus of this study is a coherent and identifiable group and that the use of a survey and interviews is an appropriate means to gather data from that group. The next section considers the steps taken to ensure that the data gathered is valid and reliable.

3.3 Ensuring quality of the data

The quality of the data in any case study stems from its validity and reliability (Yin, 2009). These two principles are particularly important in any approach looking for relationships between variables. Validity is *"the extent to which a measure or set of measures correctly represents the concept of study"*, and reliability *is "the extent to which a variable is consistent in what it is intended to measure"* (Hair et al., 1998 p. 3).

This section considers how the data are gathered to ensure that they are valid and reliable. This is important for all types of data (Yin, 2009) but the statistical techniques used to assess quantitative data are not applicable to qualitative data. This leads Guba and Lincoln (1994) to argue that a more appropriate measure for qualitative data is trustworthiness, assessed through considerations of credibility, transferability, dependability and confirmability. Credibility and transferability of the findings broadly map onto ideas of validity. Dependability and confirmability concern the reliability of the study. As well as requiring different measures of assessment, the assumptions underpinning the collection of qualitative data are not the same as those for quantitative. While this does not cause a problem with combining the different types of data (Brannen, 2005) it is necessary to analyse data within the assumptions in which it is gathered.

Sub-sections 3.3.1 and 3.3.2 set out the principles of validity and reliability explain how these qualities are ensured for the qualitative and quantitative data in this study. Sub-sections 3.3.3 to 3.3.6 focus on the quantitative data and consider the measurement of the four key study constructs. These are *organisation performance, middle manager divergent activity, strategy development profile* and *external stakeholder salience*. Sub-section 3.3.7 concludes the section by considering the control variables in the research model.

3.3.1 Validity

Churchill (1979) sees both subjective validity and construct validity as important for accurate research. Subjective validity concerns the extent to which the measure represents the concept being studied. This can be based on the opinion of subject matter experts and is called face validity and is dealt with during the pretesting and piloting of the study. Through this, the relevance and definition of the study constructs is confirmed by managers similar to those participating in the research. Subjective validity also comes from a study of the literature on the subject, where it is called content validity. This is covered in chapter 2.

In contrast to subjective validity, construct validity assesses in a more objective way what a construct is measuring. For qualitative data credibility can be supported by using multiple sources of data to minimise error, or by building strong theoretical explanations for links between constructs, as in chapter 2. For quantitative data, it is assessed using statistical techniques. Construct validity can be divided into convergent validity and discriminant validity. Convergent validity assesses the extent to which multiple measures of a construct are related and discriminant validity considers the extent to which measures of a construct do not correlate with other different constructs. This is covered in chapter 5.

External validity concerns the extent to which the findings of a study are transferable. While this is an important consideration for research based in a positivist methodology, it is not applicable to the current study. The case study approach described in section 3.2 is chosen because of the particular context of the organisation being studied. The study is not looking for findings which are generalisable to other organisations. It is considering the subject within the specific context and exploring how that context affects the phenomena studied.

3.3.2 Reliability

Reliability concerns the consistency of the study and the degree to which, following the same method, the results will be reproduced. Replicability is the goal of the positivist approach where, *"in the service of theory testing and refinement: data should be collected and analysed in such a way that another researcher collecting and analysing similar data under similar conditions will find similar results, thus helping to establish the veracity of the theory"* (Shah and Corley, 2006 p. 1823). For this reason, quantitative methods and surveys used in research are designed to have high reliability. However, the reliability of qualitative data requires different considerations.

Using Guba and Lincoln's (1994) criteria of trustworthiness, qualitative data needs dependability and confirmability which come from the data gathering process used. The ability of another researcher to repeat the study with the same result relies on clearly demonstrating the operation of the study. Confidence in the data comes from clarity of the process of data collection and analysis backed up with clear records.

The semi-structured interview process used in this study is discussed in section 3.2. As explained in section 3.2.3 the selection of participants is designed to gain a full view of the phenomena and this is found in the more extreme or surprising responses rather than in the average views. For example, this would be seen in a response of 0 or 5 about their level of divergent activity. One danger in this approach is that it may highlight managers who are offering a less considered view. Where this is the case, the interview process allows it to be brought out. Using a basis of the same questions for every interview helped reliability through allowing some consistency and comparability of response. The interview guide used is at Appendix B.

For quantitative data, whether a measure is consistent across different situations can be assessed by considering repeated measures of the same subject (test-retest reliability). Where this is not possible because of constraints on research design, researchers consider internal consistency by assessing the extent to which multiple measures of the same construct vary consistently. The most common measure of internal consistency is Cronbach's α (Hair et al., 2010). Where available, this measure is shown in the following sections relating to the measures of the constructs used in this study.

Four constructs form the research model described in chapter 2. These are organisation performance (OP), middle manager divergent activity (MMDA), strategic development profile (SDP) and external stakeholder salience (ESS). The scales measuring these constructs are set out in Table 8 below with, where relevant, details of their source and measures of reliability found in previous studies. These four constructs are discussed in the following four sections.

Construct	Measure	Source	Published Cronbach's α
Organisation Performance	Percentage crimes solved Change in total crimes recorded Victim satisfaction with police Staff satisfaction/morale Perception of overall performance	HMIC data Manager perception	N/A
Strategy Development Profile	5 item scale for command 8 item scale for planning 6 item scale for incremental 6 item scale for political 7 item scale for cultural 7 item scale for enforced choice	Bailey, Johnson and Daniels (2000)	.80 .89 .63 .78 .71 .80
Middle Manager Divergent Activity	4 item scale for championing alternatives 5 item scale for facilitating adaptability	Floyd and Wooldridge (1992)	.82 .66
External Stakeholder Salience	4 internal and 3 external stakeholder groups assessed on basis of power, legitimacy and urgency	Adapted from Agle et al. (1999)	N/A – Formative variable
Managerial characteristics	Rank/grade, role, tenure, experience	Categorical data	N/A
Organisation characteristics	Police force	Categorical data	N/A

Table 8 - Summary of constructs

3.3.3 Policing performance

The British police service does not have a single index of performance similar to the CPA used by Andrews et al. (2006). One government website, (https:\\iquanta.net) showing police performance information published by the Home Office, includes 53 independent indicators. The website of the central police inspectorate (HMIC) publishes 55 separate indicators for all police forces. While there is overlap between these two sources of published data, there are also differences of counting rules and data collection methods. In a review of the national objectives and priorities of British police between 1994 and 2004, Collier (2006) notes that the notion of police performance is *"problematic"* (p.166) due to the diversity of activities carried out and the lack of agreement over priorities.

The political influence on public sector performance measures highlighted by Boyne and Gould-Williams (2003) is seen in the changing policing priorities in the past decade. In 2009, the then Labour government abandoned a large number of performance targets previously used and set public confidence as the primary measure of police performance (Home Office, 2008). In 2011 the Coalition government Home Secretary announced that the police have *"one single mission:*

to cut crime" (2011 p.1). While the link between reduced crime and public confidence in police is hotly debated (Shilston, 2008), the distinction creates significant implications for the choice of measures of success.

3.3.3.1 Validity of archival police performance data

Police forces are assessed on a range of data collected by the force in question, Her Majesty's Inspectorate of Constabulary (HMIC), the Audit Commission (AC) and the British Crime Survey (BCS)[2]. The HMIC and AC predominantly aggregate and analyse data collected by forces while the BCS collects separate data. BCS data, however, is not easily aggregated to force level and is not used in this study.

While many of the indicators in use are well established, there are issues of validity and reliability concerning some of the data collected. First, measures based on crime levels can be affected by the willingness of the public to report crimes and interpretation of counting rules. For many crime types, only a small proportion of the crimes committed are reported to police. This can make recorded crime a poor indicator for the level of crime in communities. Fryer et al. (2009) note that the impact of policing on crime levels can be difficult to identify as some policing functions, like crime prevention, are impossible to measure. Additionally, the variation between different crimes (e.g. theft and murder, or even different types of murder) can make the use of aggregated data or comparison between small numbers of crimes questionable.

Second, some measures can be affected by administrative efficiency and do not reflect the true level of performance in the force. The rules about what counts as a crime being solved are quite arcane. A high figure of crime recorded may say more about the administrative effectiveness of the force than the quality of policing.

Third, some measures can be affected by short-term activity. A police unit wanting to increase its figures for crimes solved can easily do this by arresting and cautioning people for possession of small amounts of unlawful drugs. In the past, strictly applied targets for solving crime have resulted in relatively trivial incidents of bullying between schoolchildren being treated as a robbery.

[2] In 2014 the British Crime Survey changed its name. It is now the Crime Survey of England and Wales.

In January 2014, these questions of validity and reliability resulted in the UK Statistics Authority removing the National Statistics designation from police statistics based on recorded crime data. Notwithstanding this, these statistics still represent the best measure available of crimes recorded and solved. These measures are still a primary way that the government, HMIC, ACPO and police forces assess policing performance. This current study accepts the difficulties of using crime data as a measure of performance and takes the following steps to minimise problems of its validity.

First, it uses measures of changes in performance. By looking at the difference in the level of performance indicators in the short and longer term, any systemic differences in the way in which different forces collect data will be reduced. At the same time, using measures of performance improvement reduces the potential impact of environmental and organisational differences on the measure. Second, the study incorporates crime data with other measures of operational performance. By combining crime data with measures of investigative success (crimes solved) and measures of satisfaction of victims of crime, errors in any single measure are reduced.

3.3.3.2 Using subjective measures

The arguments for relying purely on a subjective assessment of performance (Dess and Robinson Jr, 1984) as used in previous studies are not applicable to the current study for four reasons. First, there are no issues concerning the comparison of data between different industries as argued by Brews and Hunt (1999). Second, there is no difficulty of organisations not wishing to disclose data as found by Ghobadian et al. (2008). Third, a large amount of archival data is available which is accepted and used as measures of performance by police managers and the government. Fourth, Boyne and Walker (2004) argue that the conclusions of Dess and Robinson (1984) about the validity of internal subjective assessments of performance may not be valid in the public sector.

A valid and reliable measure of police performance therefore requires a multi-dimensional model if a thorough view is to be achieved and the weaknesses of individual measures reduced. The model of the Office of Public Management shown in Figure 10 provides a framework for a comprehensive collection of measures and is used in this study. The external measures used are shown in Figure 13.

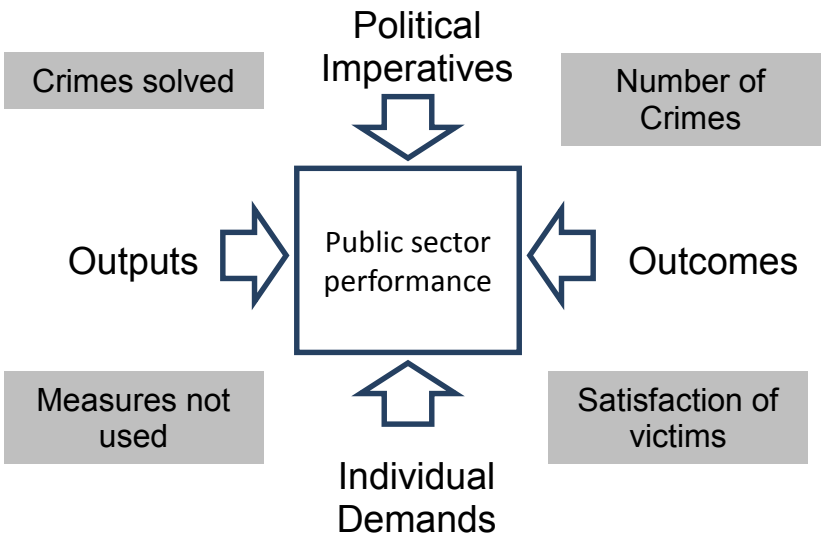


Figure 13 – External measures of performance used in this study

Output measures in relation to individual demands include the answering of calls and the speed of response to calls for assistance. These are relevant measures of police performance but are not used in this study for two reasons. First, they are not a priority measure for the government or HMIC and therefore may have less salience for managers. Second, the data is currently collected individually by forces in a manner which makes comparison problematic.

Additional to the external archival measures which are shown in Figure 5, two extra measures of performance are included in the study. First, following Rudd et al. (2008) a measure of short term sickness is included as a proxy measure of staff satisfaction and motivation. Rudd et al. also included a measure of staff leaving the organisation but this is not used in the current study as the data gathering was done during a period of staff cuts caused by government budget constraints. This means that a significant group may be leaving the organisation unwillingly through redundancy. Second, a subjective assessment of force performance was gained through the following question in the survey:

Q. Looking overall, what is your view of the performance of your force compared to other forces in England and Wales?

Respondents were asked to give their view based on a 5-point Likert-type scale ranging from 'Significantly below average' to 'Significantly above average'.

The full range of OP measures used in the study is shown in Table 9.

	Indicator	Source
Political Imperative measures	Change in level of crimes recorded per 1,000 population (12 months to March 2014 compared to March 2013)	HMIC
	Change in proportion of crimes which result in a sanctioned detection[3] (12 months to March 2014 compared to March 2013)	HMIC
Individual demand measures	Proportion of victims reporting being totally satisfied with police action (12 months to March 1014)	HMIC
	Change in proportion of victims reporting being totally satisfied with police action (12 months to March 1014)	HMIC
Internal measures	Proportion of police officer days lost to sickness of less than 28 days duration	HMIC
	Proportion of police staff days lost to sickness of less than 28 days duration	HMIC
Subjective measure	The overall performance of force compared to other forces in England and Wales?	Survey

Table 9 - Measures of organisation performance used in the study

The above measures include both internal and external sources of data as recommended by Venkatraman and Ramanujam (1986) and archival and perceptual data (Wall et al., 2004). They also represent a range of output and outcome indicators satisfying the proposals of Andrews et al. (2011).

The use of the measures shown in Table 9 has advantages in three ways. First, apart from the subjective measure, they are in the public domain and the information is easily collected. Second, they are broadly accepted by police leaders and the government as valid and important indicators of police performance. Third, they cover aspects of crime and satisfaction which are, or have been, government priorities.

3.3.4 Middle manager divergent activity (MMDA)

MMDA is measured using a scale which draws nine items from an original 16 item scale of Floyd and Wooldridge (1992, 1994, 1997). The remaining 7 items from the original scale, which are not used in this study, measure integrative activities which relate to the implementation of current organisational strategy.

Divergent activity comprises two variables. First, *championing alternatives* involves activities relating to the selling of new ideas and initiatives to senior management. Second, *facilitating*

[3] A sanctioned detection is where a suspect has been charged with a crime, reported for summons or cautioned or, in limited circumstances, issued with a fixed penalty notice.

adaptability involves activities relating to the encouragement of innovative ideas and experimentation by subordinates.

3.3.4.1 Championing alternatives

The championing alternatives construct is measured by four items (Table 10) based on the importance of middle managers being alert to new opportunities (Burgelman, 1983), and the way that middle managers influence what senior managers see as strategic (Dutton and Ashford, 1993). For each item, respondents are asked how often they engage in the activity using a 5 point Likert-type scale ranging from 'Never' to 'Always'. The mean of the four responses is then calculated.

Code	Item
Mmda1champ	Put forward new proposals or projects to higher level managers
Mmda2champ	Evaluate the merits of proposals generated in your unit, encouraging and championing some, discouraging others
Mmda3champ	Justify and define the role of new proposals to managers above you
Mmda9champ	Search for new opportunities and bring them to the attention of higher level managers

Table 10 - Survey items: championing alternatives

3.3.4.2 Facilitating adaptability

The facilitating adaptability construct is measured by five items (Table 11) based on the importance of experimentation in strategic development (Burgelman, 1983), the idea that strategy development is a continuous interactive learning process (Mintzberg and McHugh, 1985), and the ability of managers to nurture selected projects (Bower, 1970). For each item, respondents are asked how often they engage in the activity using a 5 point Likert-type scale ranging from 'Never' to 'Always'. The mean of the five responses is then calculated.

Code	Item
Mmda4fac	Facilitate experimental proposals being tried in your unit
Mmda5fac	Locate and provide resources for trial projects
Mmda6fac	Present arguments to higher level managers in order to try out experimental proposals
Mmda7fac	Encourage informal discussion and information sharing among more junior staff
Mmda8fac	Relax regulations and procedures in order to get new projects started

Table 11 - Survey items: facilitating adaptability

The original scale was validated by Floyd and Wooldridge (1992) using a sample of 259 middle managers from 25 US companies. For *championing alternatives* they report Cronbach's α value of .82, satisfying the guidelines for scale reliability of >.7 suggested by Hair et al. (2007). For *facilitating adaptability,* they report a Cronbach's α of .66 which Hair et al. suggest is acceptable for exploratory research. However, other studies report higher levels of reliability.

In a study using a research design similar to the current study, Bowd (2003) reports a Cronbach's α of .79 for *facilitating adaptability* and .72 for *championing alternatives*. Using the same scale with a different research Pappas and Wooldridge (2007) ask respondents to assess the activity of colleagues. The authors report Cronbach's alpha values of .90 for *championing alternatives* and .84 for *facilitating adaptability*.

3.3.5 Strategy development profile (SDP)

The SDP model of Bailey et al. (2000) defines six dimensions of strategy development. These are *planning, command, incremental, political, cultural* and *enforced choice*. The model suggests that in an organisation, strategy is formed through a mixture of some or all of these processes working together. This model has been chosen to measure the way strategy develops in police forces for two reasons.

First, as discussed in chapter 2, some measures used in other studies are not applicable in this study. Boyd and Reuning-Elliott (1998) propose that evidence of strategic planning could be based on seven indicators including the setting of a mission statement, long term goals and action plans. The existence of these plans and statements may be revealing for organisations that have a choice whether to do this or not. However, the current study looks at an organisation where the publication of a strategic plan containing long term goals is directed by statute. The existence of formal plans and statements does not reveal evidence about the process through which they are formed, or the motivation for forming them. This means that it is not possible to use the existence of a formal plan or formal goals as indicators of rationality of strategy development.

To explore differences of strategic development processes it is necessary to look behind the façade of strategic planning. The model of Bailey et al. (2000) allows this. By including factors which go beyond management intent, the dimensions in the model offer a more comprehensive view of strategy development. The model allows perceptions of informal as well as formal processes to be taken into account. Differences of approach are revealed from how other dimensions (e.g. *command*, *political*, *cultural*) combine with *planning*. In addition, through including the *politics* and *enforced choice* dimensions, the model may be more sensitive to the influence of stakeholders. While some questions in the survey have to be altered to fit the particular context of the organisation studied, as suggested by Denzin and Lincoln (1998), the instrument requires only minor amendment.

The use of perception measures of strategy development is well established (Hart and Banbury, 1994; Bailey et al., 2000). This approach, using perception of managers rather than more direct measures of strategy development, is useful. Collier et al. (2004) propose that use of perception measures is unavoidable with a large sample. They also suggest that, *"although perceptions do not always equate with reality, they are more important because they are likely to be the basis of behaviour*" (p. 70). For each dimension respondents are asked to grade a number of statements about their perception of how strategy forms in their organisation, using a 5 point Likert-type scale ranging from 'Strongly agree' to 'Strongly disagree'. These scores are averaged for each dimension giving a measure of the extent to which that dimension is perceived to be present in strategy development in their organisation. This score is then interpreted by comparing it with the average score for all the SDP dimensions. This shows the extent to which individual respondents see that dimension present in strategy development relative to the other dimensions.

Details of the items in each dimension are shown in the following sub-sections. Bailey e al. (2000) report Cronbach's α values for five of the six dimensions shown in Table 8 exceeding .7 , but only .63 for the *incremental* dimension. Although this falls below the usual standard for reliability of .7, Hair, et al. (2010) suggest that scores above .6 are acceptable for exploratory studies. Bailey et al. retained this dimension in the scale because of the theoretical underpinning of the model. The reliability of this variable is considered further in Section 3.5 following the results and implications of the pilot study.

3.3.5.1 Command

The command construct is measured by five items (Table 12) based on the idea that strategy is directed by a single individual who has a high degree of control (Bennis and Nanus, 1985).

Code	Item
Sdp1comm	A senior officer's vision is our strategy
Sdp8comm	The chief constable determines our strategic direction
Sdp12comm	The strategy we follow is directed by a vision of the future associated with the chief constable (or another senior officer)
Sdp33comm	Our strategy is closely associated with a particular individual
Sdp35comm	Our chief constable tends to impose strategic decisions (rather than consulting the top management team)

Table 12 - Survey items: command

3.3.5.2 Planning

The planning construct is measured by eight items (Table 13) based on the principles of strategy development as a deliberate process involving a structured, logical and rational approach to the organisation and its environment. (Ansoff, 1965)

Code	Item
Sdp2plan	Our strategy is made explicit in the form of precise plans
Sdp11plan	We have precise procedures for achieving strategic objectives
Sdp15plan	When we formulate a strategy it is planned in detail
Sdp17plan	We have definite and precise strategic objectives
Sdp23plan	We have well-defined planning procedures to search for solutions to strategic problems
Sdp29plan	We meticulously assess many alternatives when deciding on a strategy
Sdp36plan	We evaluate potential strategic options against explicit strategic objectives
Sdp37plan	We make strategic decisions based on a systematic analysis of our environment

Table 13 - Survey items: planning

3.3.5.3 Incremental

The incremental construct is measured by six items (Table 14) based on the principles of strategy development as an iterative process of limited comparisons with previous phases (Quinn, 1980).

Code	Item
Sdp5inc	Our strategy develops through a process of ongoing adjustment
Sdp13inc	Our strategies emerge gradually as we respond to the need to change
Sdp16inc	Our strategy is continually adjusted as changes occur in the market place
Sdp19inc	To keep in line with our environment we make continual small-scale changes to strategy
Sdp31inc	We keep early commitment to a strategy tentative and subject to review
Sdp38inc	We tend to develop strategy by experimenting and trying new approaches

Table 14 - Survey items: incremental

3.3.5.4 Political

The political construct is measured by six items (Table 15) based on the principles of strategy development as taking place in a political arena where power originates from control of resources (Pfeffer and Salancik, 1978). In this arena decisions are taken by bargaining and negotiation (Cyert and March, 1992).

Code	Item
Sdp6pol	Our strategy is a compromise which accommodates the conflicting interests of powerful groups and individuals
Sdp9pol	Our strategy develops through a process of bargaining and negotiation between groups or individuals
Sdp21pol	The vested interests of particular internal groups colour our strategy
Sdp27pol	The information on which our strategy is developed often reflects the interests of certain groups
Sdp30pol	Our strategies often have to be changed because certain groups block their implementation
Sdp39pol	The decision to adopt a strategy is influenced by the power of the group sponsoring it

Table 15 - Survey items: political

3.3.5.5 Cultural

The cultural construct is measured by seven items (Table 16) based on the ideas that strategy is influenced by frames of reference which are taken for granted within the organisation (Schein, 2010).

Code	Item
Sdp4cult	The attitudes, behaviours, rituals, and stories of this organisation reflect the direction we wish to take it in
Sdp7cult	There is a way of doing things in this organisation which has developed over the years
Sdp10cult	There is resistance to any strategic change which does not sit well with our culture
Sdp20cult	Our organisation's history directs our search for solutions to strategic issues
Sdp25cult	The strategies we follow develop from 'the way we do things around here'
Sdp28cult	Our strategy is based on past experience
Sdp32cult	The strategy we follow is dictated by our culture

Table 16 - Survey items: Cultural

3.3.5.6 Enforced choice

The enforced choice construct is measured by seven items (Table 17) based on the ideas that the external environment constrains strategic choice. (Hannan and Freeman, 1989).

Code	Item
Sdp3enf	We are not able to influence our business environment; we can only buffer ourselves from it
Sdp14enf	Our freedom of strategic choice is severely restricted by our external business environment
Sdp18enf	We are severely limited in our ability to influence the business environment in which we operate
Sdp22enf	We have strategy imposed on us by those external to this organization, for example the government
Sdp24enf	Forces outside this organisation determine our strategic direction
Sdp26enf	Many of the strategic changes which have taken place have been forced on us by those outside this organisation
Sdp34enf	Barriers exist in our business environment which significantly restrict the strategies we can follow

Table 17 - Survey items: Enforced choice

For each dimension the mean of the score for the relevant individual items is calculated.

3.3.6 External stakeholder salience (ESS)

Salience relates to the importance given to stakeholders by managers. The external stakeholder salience construct is measured with the adaptation of a previously used scale in the study reported by Agle et al. (1999). This scale is appropriate because a manager's perception of the importance of a stakeholder relates to the degree to which they are considered to have power and their claim has legitimacy and urgency. Participants are asked to consider seven stakeholder

groups who are potentially concerned with the development of strategy in police forces. Four of the groups are internal to the force and three of the groups are external. See Table 18.

Internal stakeholders	External stakeholders
Force ACPO team	Police and Crime Commissioners
Operational police officers	Central government
Police staff	Crime reduction partnerships
Staff associations	

Table 18 - Stakeholder groups

For each stakeholder group, participants assess their level of power, legitimacy and urgency using a 5 point Likert-type scale ranging from 'None at all' to 'Very high'. An overall measure of the salience construct for a particular stakeholder group is calculated from the average of these scores. Separate scores for external and internal stakeholder salience are calculated from the average of the relevant stakeholder groups. The measure of ESS is then derived from the ratio of the average salience of external stakeholders to internal stakeholders.

3.3.7 Control variables - managerial and organisational factors

Previous studies recognise that the size of the organisation (Floyd and Wooldridge, 1992) and the role of a middle manager (Floyd and Wooldridge, 1997) may influence the variables in this study. Potential errors due to differences caused by environmental or organisational factors which are not part of the study are mitigated in the following three ways.

First, all constituent parts of the organisation studied are large (> 1,900 personnel) and have a similar structure. Second, the middle managers who form the population of this study perform broadly similar roles due to the comparable level in each force's hierarchy. This also means that they will have similar career profiles most having over 10 years experience as part of the organisation. Third, change in organisation performance is used to avoid differences of context of the individual participants. These factors should reduce the possibility of confounding variables affecting the data.

Three further factors which have been identified as affecting the level of middle manager strategic activity will be controlled for in the study. First, Mantere (2008) identifies that the expectation of top management can influence a manager's willingness to engage in strategic activity. This is assessed through the length of time in years the chief officer has been in post. The researcher has often been confronted with stories about chief officers new in post who are

intent on change and this factor needs to be considered in the analysis. Second, the tenure in a particular post can also be influential (Floyd and Wooldridge, 1992) with managers who have longer experience in their post engaging more in strategic activity. This is measured by the length of time in years that the respondent has held a post or rank. Third, Raman (2009) identifies that managers who have experience in a variety of organisations are more willing to engage in strategic activity. This is measured through whether individual respondents have held managerial posts in organisations outside the police service.

This section has detailed the measurement of constructs used in this study and how their validity and reliability is supported by the theoretical basis of the measurement used and, where applicable, validation in previous studies. The following section describes the method of analysis used.

3.4 Analysis

Having established the steps which underpin the validity and reliability of the data collected in the study, the method of analysis also needs to be suitable for the methodology followed. Two types of data are analysed. First, there is quantitative data from the survey. Second, there is qualitative data from the interviews and free-text responses in the survey. The following subsections detail first the method of statistical analysis of the quantitative data and then the thematic analysis of the qualitative data.

3.4.1 Quantitative analysis CB-SEM versus PLS-SEM

Structured Equation Modelling (SEM) is now well established in strategic management research. In a study of 92 studies in 10 strategic management journals, Shook et al. (2004) identifies that the use of SEM has grown significantly since its first use in 1984.

A quantitative analyst using SEM has a choice between two approaches (Hair et al., 2011). Covariance based SEM (CB SEM) develops a theoretical covariance matrix based on a set of structural equations. By contrast Partial Least Squares SEM (PLS SEM) aims to maximise the explained variance of the dependent latent constructs.

Hair et al. (2012) see the two approaches as complementary and suggest that with good data and measures, both approaches yield the same results. However, they argue that there are reasons relating to the research model and the data which can make PLS SEM a more

appropriate approach to use. These reasons primarily relate to the purpose of the research, the size of the sample and the nature of the constructs. They are summarised in Table 19.

	CB SEM	PLS SEM
Purpose of the research	Theory testing and confirmation where theory is strong.	Prediction and theory development
Sample size	Sensitive to sample size	Deals with a wider range of sample sizes (smaller and larger)
Nature of model	Appropriate for simple structural model with fewer constructs and indicators	Deals with higher model complexity.
Nature of constructs	Requires complex and limiting rules when using formative constructs	Can use non-normal data and both reflective and formative constructs.

Table 19 - Reasons for choosing CB-SEM or PLS SEM (adapted from Hair et al. (2011))

This study uses PLS SEM to analyse the data. Although the overall sample is large enough to satisfy minimum requirements of CB SEM, the issue of heterogeneity of the sample requires the consideration of smaller sub-samples. The research model is also complex. It uses 19 latent variables informed by 77 indicators.

Some constructs used in the research model are totally or largely formative. This means that the indicators define the construct rather than being manifestations of the construct. The implication of this is that while a change in an indicator will result in a change in the construct, a change in the construct will not result in change in all indicators. The indicators will not therefore be expected to covary with each other and internal consistency is of less importance. Finally, the measures of *external stakeholder salience* and *organisation performance* variables use ordinal data.

3.4.2 Qualitative analysis

Using a grounded theory approach to analyse the qualitative data is not appropriate because the study is based in the a priori theorising set out in chapter 2. However, as a case study, the primary concern is to understand the case and there is a need for analysis methods to allow for factors which may be unexpected to be recognised. Template analysis (King, 2004) is chosen as it provides a structured way of analysing the important points coming from interviews while being guided by the research questions.

The analysis follows the process recommended by King (2004) and comprises three stages. First a priori high level codes are set. As the research is a case study guided by research questions, the three constructs which form the basis of the conceptual model is chosen to form the initial high level template. These are *middle manager divergent activity*, *stakeholder salience*, and *strategy development profile*. Following some quantitative analysis, two other factors are seen to have potential significance. These are the impact of hierarchy and structure, and changes in the external environment around policing.

Second, a small number of interviews are then analysed using these initial codes which are split up and added to as data emerge. During this process the more specific codes emerge which form the basis of the analysis. These include rank, rationality and impact of internal organisational systems. Third, the amended template is used as the basis for analysing the remaining interviews and codes are amended or new codes are added as different ideas come forward. The final template developed is shown at Appendix C.

Because the study has a realist basis, it is important that the results of the template analysis have validity and reliability. In this analysis it is particularly important that the researcher considers alternative explanations which may have been overlooked in interpreting the interviews. A lone doctoral researcher does not have the opportunity to compare his views against those of other researchers to achieve this. In order to improve the quality of the qualitative analysis in this study the researcher analyses the data three times, with a period of time between. While the results from these separate analyses are broadly consistent, small differences are apparent which increased the richness of the results. Additionally, results from the interviews were compared with results from the survey looking for areas of conflict or support.

3.5 Pre-tests and pilot study

This section sets out details of the pre-testing and piloting of the measurement instruments used in the research. It is difficult for a researcher to clarify participants' doubts or misunderstandings using a self-completion survey. Therefore the results of pre-tests and pilots are important to guide effective data collection.

3.5.1 Pre-testing

Pre-testing the constructs used in the study was carried out in three parts. This involved discussions with:

- police managers working at the National College of Police Leadership (now the College of Policing);
- 25 superintendents and chief superintendents on the Strategic Command Course at the National Police Improvement Agency; and
- four police managers of superintendent level and one of executive level in police forces.

These inputs confirmed that the divergent activity of middle managers was recognised as an important issue for police forces. They also confirmed that the stakeholders listed in the survey included all of the key groups around strategy of police forces. Lastly the participants considered the questions in the study were relevant and understandable to middle managers in police forces. These discussions also resulted in four amendments to the study.

First, some participants had concerns about whether respondents at inspector rank were actually too distant from the force executive to be considered potentially influential. During 2012 this question was discussed with inspectors and chief inspectors at the Scottish Police College. In the light of these discussions the researcher decided that inspector level managers should remain in the study as they fall within the definition of middle manager set out in section 3.2 and ACPO guidelines defines their role as 'more strategic'.[4]

Second, participants raised concerns about potential misunderstandings of the business language used in the survey, and potentially diverse views of the meaning of 'strategic planning'. This resulted in references to *business environment* being changed to *working environment* and general references to *strategic planning* not being used in the survey.

Third, participants thought that question mmda9fac, (*Relax regulations and procedures in order to get projects starte*d), was potentially problematic as police managers are governed by a number of regulations which are based in legislation and therefore cannot be 'relaxed'. To avoid difficulties of interpretation, this question was amended to "*Relax policies and procedures in order to get projects started"*.

[4] 'Policing in the UK' from www.acpo.police.uk

This pretesting supported both the importance of the study for the police service and the method proposed to collect data. It also supported the idea of middle managers as strategic actors in police forces and confirmed that the questions in the study were understandable to this group and that there were no issues of interpretation. The following section discusses the pilot study of the survey.

3.5.2 Pilot study

Having established that the survey questions were appropriate for the proposed population of middle managers, the survey was piloted in five police forces which represented a range in terms of size, population, budget, urban and rural working. Following completion of the survey, 18 respondents volunteered to take part in short telephone interviews to help the researcher understand how they saw their role and approached and understood the questions in the survey.

232 responses to the pilot were received, representing an overall response rate of 17.7% that resulted in 183 usable responses. Following cleaning and screening of this data, 49 responses where the survey had not fully completed or where there were questionable responses[5] were removed. Analysis of these responses did not suggest that they came from any particular force, rank or group. In the follow-up interviews, respondents reported that they did not find the survey too long and suggested that people abandoning the survey may be due to them being called away for an urgent task.

The response rate varied between the five forces involved, ranging from 8% to 16%. Examination of the response from the force with the lowest rate revealed that this may have been affected by the way middle managers were informed of the survey by the force. The fact that the survey took place during a holiday period may also have adversely affected the response rate. The sample was tested for non-response bias and no evidence of this was found.

Analysis of questions revealed a small number were missed out, or received a 0 response (not able to say), from more than one respondent. These responses were spread across 36 different questions and no pattern was apparent. These questions were discussed with respondents in follow-up interviews and no reason emerged to change the wording. It may be pertinent that

[5] For example, choosing the same answer for every question.

all of these items were from the second half of the survey so it is possible that some of these responses were due to respondent fatigue due to the length of the survey.

Outliers were studied to see if they could be associated with a respondent performing a unique or atypical role. No example of this was found. There was also no evidence to suggest that any outliers were other than honest opinions of respondents. For the purposes of this analysis, outliers were not removed or adjusted. Cronbach's α was calculated for the 8 variables in Parts 1 and 2 of the survey and compared with the results reported by the authors of the scales. (Table 20)

Variables	Pilot study	Floyd and Wooldridge (1992)
Middle manager divergent activity		
Championing alternatives	.853	.90
Facilitating adaptability	.809	.84
	Pilot study	**Bailey, Johnson and Daniels (2000)**
Strategy development profile		
Command	.706	.80
Planning	.855	.89
Enforced	.808	.80
Culture	.735	.71
Incremental	.597	.63
Politics	.763	.78

Table 20 - Cronbach's α for the variables in the pilot study

This shows that the reliability of the variables was broadly similar to previous studies. Seven of the variables satisfy the criterion of being larger than .7 as recommended by Hair, Money et al. (2007). The *incremental* variable showed a lower score as in the original study validating this scale. Hair, Money et al. suggest that a Cronbach's α score of .6 is acceptable for exploratory research. As a result of these findings, the construction of the *incremental* variable was further considered.

None of the six items making up the *incremental* variable was significantly affected by gaps in the data which suggests that any difficulty with these items was not related to a perception of complexity or difficulty in the minds of respondents. A small error was found in the wording of one of the items which was corrected. The wording of these items was discussed with respondents in follow-up interviews and no particular difficulties of interpretation emerged. Despite the lower value of Cronbach's α, the *incremental* variable was retained by Bailey et al. (2000) because of its strong theoretical basis and it is retained in the current study.

A One-Way Analysis of Variance revealed that the *rank* of the respondent significantly explained variance of both dependant variables *championing alternatives* and *facilitating adaptability.* There was a statistically significant difference at the p<.01 level for *championing alternatives* (F(3, 175) = 6.14, p = .001) and *facilitating adaptability* (F(3, 175) = 4.36, p = .005). For each of these differences the effect size (Cohen, 1988) is medium to large (eta squared = .69 to .95). Results are shown in Table 21.

	Insp or equiv.	Ch Insp or equiv.	Supt or equiv.	Ch Supt or equiv.
Championing alternatives	3.46	3.77	4.03	4.22
Facilitating adaptability	3.27	3.39	3.65	4.02

Table 21 - Mean values of key variables in pilot study

This suggests that the middle managers in the sample were not a homogenous group but divide into separate groups on the basis of rank.

Eighteen short interviews were conducted with volunteer respondents, focusing on their perception of their role, and on the design and ease of completion of the instrument. These confirmed that the survey was not seen as too long and was straightforward to understand. The issues being raised by the survey were seen to be relevant and important for police forces.

Generally respondents at inspector and chief inspector level thought that managers of their rank should have more influence. This view was often justified by a perception of extra responsibility due to the number of middle managers being cut over the last decade.

Managers interviewed generally had no problem thinking about their force strategy and saw it as the priorities being followed as summed up in the strategic plan. Interviewees expressed a degree of scepticism and even cynicism about the strategic planning process in their force and generally saw it as something distant from their role. Some interviewees in more senior ranks thought that some managers at inspector level, particularly in uniform patrol roles, may feel less engaged with strategy and have more difficulty answering the questions. This view was not expressed by inspectors interviewed.

3.5.3 Conclusions and changes as a result of pilot study

The pilot study suggests that overall, the process used to distribute the survey and collect the data resulted in a small but representative sample of the population. The variation in response rate resulted in the researcher ensuring that clearer instructions were given to force

representatives responsible for distribution of the main survey, and where possible meeting them personally to discuss the study.

Despite the concerns raised by some interviewees, the researcher decided to retain inspector level managers in the study. This was for four reasons. First, they are a large group of managers generally involved in important service delivery roles. Second, the level of management fits the definition of middle manager used in the study. Third, police service guidelines identify their role as strategic. Fourth, inspectors interviewed thought they had, or should have, strategic influence.

The results of the pilot raised a question about the extent to which the middle managers studied should be seen as a single homogenous group. This is key to properly analysing and understanding the data gathered. It is considered further in chapter 5.

As a result of the interviews, two minor changes were made to the wording of items to make them simpler. In item sdp20cult, the word 'history' was changed to 'experience'. In item sdp29plann, the word 'meticulously' was replaced by 'carefully'

This section describes how the instrument for data collection was adapted and tested to ensure that it was relevant to the target population and produced data which was reliable and valid. It confirms that the questions and issues explored in the study are relevant to middle managers as are seen as important.

3.6 Summary

This chapter describes how the study follows a mixed methods case study approach comprising a quantitative analysis of self-completion surveys followed by interviews. This is consistent with the post-positivist methodological position of the researcher and similar studies in the field. The case study approach is designed to gather rich data about the actions and motivations of managers in a unique context. As such it builds on the growing Strategy as Practice discipline.

Quantitative data are collected from a large sample of managers, following which a small sample is interviewed to gain additional data to help explain and interpret the quantitative results. Quality of the quantitative data is ensured by using previously validated scales which are pre-tested and piloted. This results in some minor amendments to the scales to take account of

particular issues of language in the organisation which is the focus of the study. The pilot study also raises questions about the heterogeneity of the middle manager target population which are explored in the main analysis. Quality of the qualitative data is ensured through clearly structured methods of interviewee selection, data recording and analysis.

Partial Least Squares – Structured Equation Modelling is chosen for the quantitative analysis as it allows the researcher to study the complex research model comprising both formative and reflective latent variables. Template analysis provides a structured way to carry out and record the analysis of the interview data.

The next chapter considers the context of the organisation within which the study is conducted.

Chapter 4 Context of study - The British police service

This chapter explains why the British police service is an appropriate context to explore the research questions set out in chapter 2 and explains specific issues around studying policing organisations. The chapter describes the implications of being part of the public sector and how this affects the way that strategy is developed and implemented.

Section 4.1 describes the public sector context and how this has developed in the past 20 years giving managers more control over the resources of their police force and more accountability for performance. Section 4.2 sets out the current structure of police forces in Britain and the similarities and differences between forces. Section 4.3 explains the strategic management processes used in forces and how the development of strategic plans has been a statutory requirement of police forces for almost 20 years. Section 4.4 concludes by describing why the police service provides a rich opportunity to study the strategic activities and impact of public sector middle managers.

4.1 British public service organisations

Organisations in the public sector perform a wide range of roles but they all get the majority of their funding from central or local taxation. This inevitably results in strongly political environments where discontinuities can be common as governments or councils change. Starting in the 1990s the British public sector, in common with those in some other developed countries, has experienced two significant changes. These are a reduction in public trust and the introduction of performance management practices.

For the police service, levels of public trust can be affected by high-profile failings or miscarriages of justice[6], but falling trust in government institutions is a long term trend in most developed countries (Edelman, 2012). This has brought with it demands for greater transparency and accountability. Mason et al. (2014) conclude that levels of public trust and other performance

[6] For example the shooting of Jean Charles de Menezes in London in 2005

measures are associated for a police force but note that the link is complex and requires more detailed study.

Possibly linked to the reducing trust in public institutions, organisations have experienced change through what has become to be called 'New Public Management' (NPM) (Butterfield et al., 2005). This involved a move to private sector practices and a focus on management and performance measurement rather than administration.

There is some disagreement between observers about how NPM actually affected individual organisations, but Butterfield et al. state that,

> *"Several case studies have noted a significant broadening of the middle-management role similar to that found in the private sector, with increased responsibility for managing people and performance, finance, marketing and business strategy." (2005 p.330)*

NPM brought with it more devolved responsibility for middle managers but it was accompanied by 'delayering' and the reduction in managers at more junior levels to reduce overheads. The result was that junior middle managers were being held accountable for performance and the use of resources in a way unknown ten years earlier. Managers in organisations like police forces were required to manage and think strategically rather than merely administer the decisions and directions of government.

4.2 Structure of the British police service.

Policing in Britain is carried out by a large number of separate and largely autonomous forces which vary in size, approach and policing problems experienced. However, all the forces share a similar mission, structure, regulatory framework and strategic planning history. This allows valid comparison between management activities in the different forces.

The structure of modern policing in Britain dates back to 1829 when the Metropolitan Police in London was created by the Home Secretary Robert Peel. Other forces were then established in towns and counties and by the end of the 19th century there were over 200 police forces of varying size and effectiveness in Britain. During the 20th century, successive mergers of forces have led to the present structure. The most recent merger of police forces in England and Wales

was in 1966 and the current geographical structure of forces has been unchanged for the past 48 years.

British policing in 2014 is predominantly carried out by 44 geographical police forces each responsible for an area which outside London is usually coterminous with one or more counties. In addition, there are three forces responsible for more specialised areas of policing. These are the British Transport Police, who deal with the railways and London underground system, the Ministry of Defence Police responsible for MOD establishments, and the Civil Nuclear Constabulary responsible for nuclear sites and policing the transport of nuclear material. At the time of the research, the investigation of more serious national and international offences is carried out by the Serious Crime Agency and Serious Fraud Office. However, almost all of the police activity experienced by members of the public comes under the control of one of the 44 police forces.

Of these 44 geographical forces, Police Scotland is responsible for all policing in Scotland, which has a different legal system to the rest of Britain. The remaining 43 forces of England and Wales, commonly called 'Home Office forces', are shown on the map in Figure 14. In 2012, the Police Reform and Social Responsibility Act 2011 introduced elected Police and Crime Commissioners (PCCs) for forces outside London[7]. The PCCs do not have the powers of a police officer and are responsible for securing effective and efficient policing in their force area. The 41 forces overseen by PCCs are the focus of the study and are referred to as PCC forces.

[7] This legislation did not apply to the Metropolitan Police where the PCC function is carried out by the Mayor's office, or the City of London Police where the Court of Common Council performs a similar role. These two forces have different governance arrangements for historical reasons and are not included in the study.

Figure 14 – Map of English and Welsh police forces

4.2.1 Differences between forces

The size and work of the 41 PCC forces varies considerably due to the geographical area covered by each force and the demographic make-up of its population. Table 22 shows a range of descriptive statistics for these forces.

	Lowest	Highest
Geographical area	597 km^2	10,976 km^2
Number of personnel	1,166	11,971
Resident population	495,000	2,638,000
Crimes recorded/'000 population	35.99	69.16

Table 22 - Variation between PCC police forces

These variations, which are mainly beyond the control of the individual forces, can result in differences of organisation performance. For example, it is easier to respond to emergency calls more quickly in a small urban area than a large rural county. To allow for this in the assessment of organisation performance, forces are not compared with all other forces, but with a group of

forces identified as 'most similar' on the basis of demographic data including the level of deprivation, unemployment, terraced housing and single-parent households.

4.2.2 Similarities between forces

In common with other parts of the public sector British policing has been subject to cuts in funding which has affected all forces. In 2010 the Government announced that central funding for policing would be reduced by £2.4bn by 2015. This is 20% of the policing budget. As about 80% of the costs of policing are in personnel, this cut in funding inevitably results in a reduction in staff. Between March 2010 and March 2013, the total number of police officers and police staff (see following sub-section) in British police forces fell by 28,173 (12.6%). At the time of the study police forces were dealing with the impact of these cuts.

Despite the changes brought through NPM, all police forces in Britain are defined as machine bureaucracies (Mintzberg, 1979) with all personnel in clearly defined roles, ranks or grades. Police staff grades vary between different forces but individual roles can be compared in terms of responsibility to police ranks. Police officer ranks are set by the Home Office and are the same for all forces. The nine levels are shown at Figure 15. Therefore, although the titles of police staff roles are not standard, individuals are able to equate their role with an organisational level.

Police officer rank	Organisational level
Chief constable Deputy chief constable Assistant chief constable	Executive managers
Chief superintendent Superintendent Chief inspector Inspector	Middle managers
Sergeant Constable	Supervisory managers

Figure 15 – Police service ranks

Executive managers are responsible for the performance of the force, middle managers for the work of units or functions at HQ or local level, and supervisors (who may be constables) for the day to day work of operational officers.

Applying the definition of middle manager used by Wooldridge and Floyd (1990) suggests that the police officers above supervisor but below executive level should be included in the study. Additionally, there has been an increase in number of non-sworn personnel in management positions in police forces in the past 20 years at all levels apart from chief constable. These 'police staff' managers will often be involved in more specialised work in headquarters departments and units but they have potential strategic influence.

The four ranks shown as middle managers in Figure 12 can perform very different roles in practice. An inspector will generally be responsible for a team of sergeants and constables and may do shift work providing the operational policing response for part of a day. In comparison a chief superintendent will be responsible for large geographical part of the force or an HQ department. In some forces, chief superintendents are included as part of a senior management committee where they will have regular direct interaction with the chief constable.

This variety of roles between the four ranks included in the definition of middle manager suggests that, within the police service, middle managers may not act as a single homogenous group. This difference of activity may also be associated with a difference of view. The way in which different levels of middle managers group together is considered in chapter 5.

4.2.2.1 Police officers and police staff

All police forces comprise a mix of police officers and police staff. Different regulations and conditions govern the two groups. Police officers all join as constables and serve for at least two years in this rank before possibly being promoted. Police officers take an oath on joining and hold the Office of Constable giving them extra legal powers such as the power to stop and search a member of the public. They are not employees and their recruitment and conditions of service are set in Home Office regulations.

Police staff, in contrast, are not sworn and are employees who hold no legal powers beyond any other citizen. Some of their work is controlled by law and government regulation, but individual forces have more flexibility in how they recruit and use police staff. Some are recruited directly into senior roles having had experience in other private or public sector organisations.

The distinction between police officers and police staff does not prescribe the work in which they are employed. Broadly police officers are more used in operational roles and police staff in policy, support and administration. However, this difference has become blurred as more police staff undertake work such as crime investigation, prisoner detention, forensic examination and uniform patrol. Police staff are employed in all roles alongside police officer colleagues, apart from those requiring legal powers.

This distinction between groups of managers in the police service is similar to the difference of clinicians and managers in a professional bureaucracy like the NHS. Police officer managers can be looked at as hybrid managers. These are defined by Burgess and Currie (2013) as combining professional experience with management responsibility. Burgess and Currie (2013) suggest that the special knowledge of hybrid managers allows them to play a greater strategic role. This builds on an earlier study of Currie and Proctor (2005) who find that the professional bureaucracy structure of the NHS constrains the strategic activity of middle managers who see themselves as having less authority than the professional clinicians.

The British police service therefore provides the opportunity to study a large number of easily identifiable middle managers working within a similar context and performing comparable roles. These managers are well trained and have an enhanced devolved strategic role as a result of New Public Management. The police service is working in a dynamic environment where resources and demands are changing and new strategies are being developed. The research is able to explore how and why middle managers contribute to these strategic changes through their divergent activity.

4.3 Strategic management in the British police service

The changes under NPM have included the introduction of devolved management structures and an increased focus on measuring performance against published objectives. Some of these changes remain controversial. In a review of strategic management tools in the public sector, Williams and Lewis suggest,

> *"…it remains questionable whether private sector models are easily implanted or indeed helpful in public management practice."* (2008 p. 654)

Despite this, the changes have resulted in management responsibility being pushed down in forces and the middle managers shown in Figure 15 being expected to perform more strategic roles.

Strategic management principles started to be introduced into the public service in developed countries the 1980s (Stewart, 2004). Following the introduction of Management by Objectives ideas (Lubans and Edgar, 1979) in the 1980s, some British police forces also started to produce organisational plans designed to give cohesion and consistency to the force. In 1998 the government formalised this, requiring police forces to publish 3-year "strategy plans". The statutory requirement on police forces to publish strategic plans means that it is not possible to use the existence of plans as evidence of strategic planning practices, as in other studies (for example O'Regan and Ghobadian, 2007).

At the time of the study, the strategic management of British police forces is a balance between four different people and groups. These are shown in Figure 16.

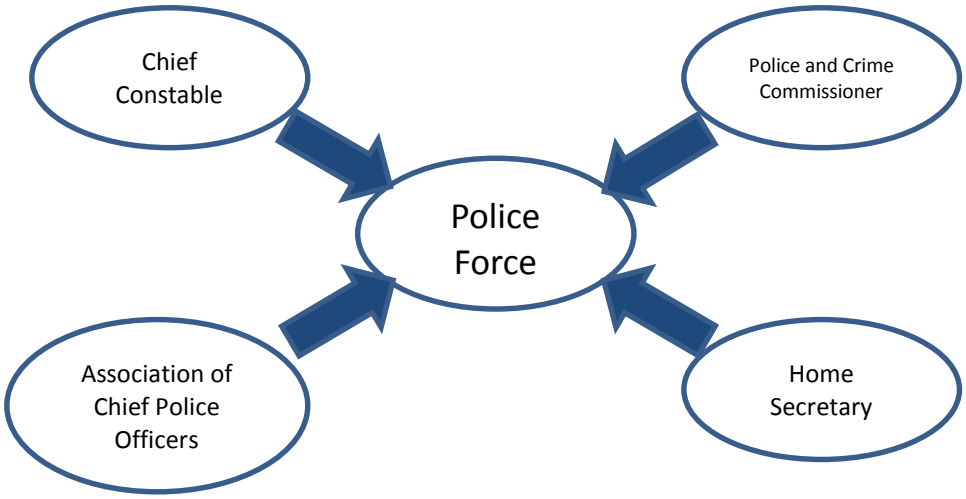


Figure 16 – Strategic influences on the working of a police force[8]

First, chief constables have the legal authority for the direction and control of their force. They are experienced police officers who will have joined as constables. Strictly, they have operational autonomy in that no person can lawfully direct them to enforce or not enforce a

[8] Since this study, ACPO has been disbanded and its role in considering national policy and guidelines has been taken up by the College of Policing.

law, or arrest or not arrest a person. However, in practice, this autonomy can often be constrained due to the need to balance the demands of the other stakeholders.

Second, PCCs are elected officials in each force area for a four year period and are responsible for providing an efficient and effective police force. They control the funding for the force which they allocate following consultation with the chief constable. They are also required by law to publish an annual Police and Crime Plan setting objectives for the force which the chief constable has to take into account.

Third, the Home Secretary sets the rules and regulations under which police forces and PCCs work, and decides how to apportion the part of police funding which comes from central funds. They also have the power to set strategy and priorities for the Police Service. In 2010 the Home Secretary said that it is the mission of the British police service to "Reduce crime – No more and no less".[9]

Fourth, the Association of Chief Police Officers (ACPO) is made up of the executive managers of all forces. Their role is to set policy and guidance for the service which will share best practice and assist the cooperation and coordination of forces dealing with criminality and incidents which cross force boundaries.

The number of stakeholders around the British police service means that it provides a rich context in which to study strategy development. The legal requirement on police forces to publish strategic plans may suggest the existence of formal rational decision making. The study has the opportunity to look behind this façade to look in more detail at the strategy development processes at work.

4.4 Summary - The police service as a focus for the study

This chapter sets out the factors about the British police service which are relevant and give context to a study of the strategic influence of middle managers. There are five reasons why police forces are a relevant focus for a case study on the strategic activities of middle managers.

[9] Speech by Theresa May to the Association of Chief Police Officers and the Association of Police Authority's conference 29th June 2010.

First, it comprises a large number of separate organisations, each with similar mission, structure, occupational culture and regulation. Potential problems of combining and comparing data between organisations in a cross-sectional case study are therefore reduced. Second, due to clear definition of roles which are similar between forces, middle managers as a group are easily defined. Individuals within the groups are also easily identifiable and accessible. Third, the managers who are the participants in the research perform similar roles and have similar experience. Therefore the need for control variables is reduced. Fourth, there are well established patterns of multiple stakeholders, often with competing objectives, providing managers with complex strategic trade-offs. The police service middle manager needs to work with these stakeholders in well defined Crime reduction partnerships (CRP). Fifth, despite the size and age of police forces, there is very little empirical research to test the applicability of management ideas in a policing context. Particularly, although there is more than a decade of experience with strategic planning, there is almost no research testing its value.

These aspects of the context of the police service which make it a rich focus for the study also raise some additional considerations for the research. These are principally about the potentially different groups of middle managers, and the measurement of variables, particularly in relation to organisation performance.

This chapter sets out the context of the research. The activities and perceptions of managers need to be understood with reference to the environment within which they are found. The British police service is undergoing profound change which is impacting on managers at all levels. The next chapter describes the data gathered through the survey and interviews.

Chapter 5 Data Analysis: Survey and Qualitative Interviews

Having discussed the particular contextual factors of the British police service which the study must consider, this chapter considers the analysis of the data collected, and the findings from the analysis. It does this in four parts. First, it details the participation in the online survey and interviews. Second it discusses analysis of the sample to establish the extent to which middle managers in police forces can be seen as a single homogenous group. Third, it looks at the data in relation to the individual constructs which form the basis of the model. Fourth, it assesses the research model and sets out the findings in relation to the four hypotheses shown in chapter 2. The chapter uses the ideas of Brannen (2005) to bring together the quantitative and qualitative data. Where relevant, sections examine the results of the survey before considering how the qualitative interview data corroborates, elaborates, complements or contradicts the quantitative data to achieve a more complete view.

Section 5.1 sets out details of the sample of middle managers who participated in the study. It evaluates the extent to which they cover all aspects of the roles of middle managers in English and Welsh police forces. Section 5.2 considers what the data say about who should be seen as strategic middle managers in the police service. It shows that, within police forces, the four ranks included in the study should not be seen as a single homogenous group of managers but split into more than one group on the basis of rank. The extent to which the managers included in this study can be considered a single group within a single police service organisation is important for two reasons. First, it influences how the data gathered should be analysed and interpreted. Second, it affects the way that the conclusions of this study should be used. Section 5.3 then looks more closely at why the groups of middle managers differ and identifies that the two groups have a different view of the strategy development profile dimensions of a police force. It describes how the model of Bailey et al. (2000) needs to be adapted to properly analyse the views of these managers.

Sections 5.4 to 5.6 discuss the data in relation to the constructs on which the study is based. Section 5.4 considers the level of engagement of middle managers in divergent strategic activity and the extent to which this is influenced by office, rank and role. Section 5.5 explores managers' perceptions of stakeholder salience, and section 5.6 their views of strategy development profile.

Section 5.7 then presents the results of a PLS-SEM analysis which tests the research model described in chapter 2. This section examines the links between the constructs and considers the extent to which the hypotheses of the study are supported.

5.1 Data collection

This section discusses the data collection incorporating the learning from the pilot study set out in chapter 3. The population of managers relevant to this study comprises all police officers and police staff middle managers in PCC police forces in England and Wales holding the rank of inspector, chief inspector, superintendent and chief superintendent, and all police staff managers with a similar level of responsibility. Gathering data from all of these managers is not feasible, so a sample is used. The validity and reliability of the data gathered depends on the extent to which the sample is representative of the population. Additionally, the sample must be large enough for the results of statistical analysis to be meaningful.

The bureaucratic nature of police forces makes this group of managers easily identifiable and the sampling frame for the study is the police officer and police staff managers of the four levels identified, recorded on the force Human Resources (HR) database. As this database forms the basis of personnel management in the force, the researcher can be confident that it is accurate.

Letters were sent by the researcher to the chief constable of each police force in the population who had not been part of the pilot study asking for their force to participate in the study. (Appendix D) Seventeen forces agreed to participate (46%). Reasons given for not participating included a perception that there was survey fatigue among force managers, possible conflicts with other studies going on in the force, and force policy strictly controlling the number of surveys carried out each year.

In December 2013 and January 2014, an email (Appendix E) was sent by the force HR Department to all police officers in the force between the ranks of inspector and chief superintendent, and to all police staff with similar levels of responsibility. This email invited the respondent to participate in an on-line survey. A week later, a follow-up email (Appendix F) was sent to all eligible managers encouraging participation. As part of the survey, respondents were asked whether they would be willing to take part in a telephone interview to further discuss their responses. From those who expressed willingness, 30 were chosen for further interview.

Selection was made on the basis of their demographic data and responses to try to gain as broad a range of *rank*, *office* and view as possible. These participants were sent an email inviting them to participate in an interview (Appendix G). Of these 24 replied and were interviewed.

5.1.1 Responses to the survey

In total, 742 survey responses were received, which represents an overall response rate of 15.8% of the middle managers in participating forces. Jin (2011) suggests this is in the average range for web-based surveys. Details of screening and cleaning of the data from the survey are included at Appendix H. This resulted in the removal of 55 responses where the survey had not been sufficiently completed, leaving 687 usable responses.

The resulting numbers of middle managers participating in the study, broken down by rank and office, is shown in Table 23.

	Total in 17 participating forces*		**Number participating**			**Overall response rate**
	Police officer	**Police staff**	**Police officer**	**Police staff**	**Data missing**	**%**
Inspector or equiv.	1,730	1,321	261	142	4	13.4
Chief inspector or equiv.	501	403	82	80	1	18.0
Superintendent or equiv.	245	283	51	35	-	16.3
Chief supt. or equiv.	111	96	18	13	-	14.9
Total	2,587	2,103	412	270	5	14.7

*from www.gov.uk/statistics/police_workforce_strength - March 2014 Government statistics for police staff are not broken down by grade.

Table 23 - Usable responses to survey

Police officer respondents on average have less time in their current role, and are more likely to work in a geographic command team. These data also show that the higher the rank of respondents, the more likely it is that they have only a short time in their current role. This is consistent with the researcher's experience of police officer managers being expected to be omni-competent and gather a broader range of operational experience than their police staff colleagues who generally perform more specialist roles. See summary statistics in Table 24.

Police staff managers are three times more likely than police officer colleagues of comparable rank to have no personnel reporting to them. They are also twice as likely to have had management experience outside the police force. These data again possibly reflect the employment of police staff managers in more specialist roles and that they are recruited for more technical capabilities.

	Office		Rank			
	Police officers	Police staff	Insp.	Chief insp.	Supt.	Chief supt.
What is your current role?						
Geographical Operational Unit	45.9%	6.8%	36.6%	20.9%	25.0%	22.6%
HQ Operational Unit	33.5%	36.0%	30.9%	41.1%	35.7%	38.7%
HQ Policy Unit	8.0%	15.2%	7.2%	14.1%	20.2%	12.9%
Other	12.4%	42.0%	25.2%	22.7%	19.0%	25.8%
How many years have you been in your current role?						
1 year	41.3%	10.4%	25.8%	30.7%	33.7%	45.2%
2 years	17.2%	10.7%	12.8%	19.6%	18.6%	3.2%
3 years	9.7%	8.5%	10.8%	4.3%	12.8%	6.5%
4 years	5.1%	10.7%	7.1%	5.5%	8.1%	16.1%
5 years	4.1%	8.9%	5.9%	6.1%	5.8%	6.5%
More than 5 years	22.6%	50.7%	37.6%	33.7%	20.9%	22.6%
How many people directly report to you?						
None	6.5%	19.1%	11.9%	13.7%	9.3%	0%
Fewer than 5	17.9%	29.6%	19.3%	30.4%	23.3%	19.4%
6 to 10	10.9%	22.8%	14.1%	18.0%	19.8%	35.5%
More than 10	64.7%	28.5%	54.7%	37.9%	47.7%	64.5%
Have you had experience as a manager outside the police service?						
Yes	35.2%	63.0%	44.0%	50.6%	45.3%	48.4%
No	64.8%	36.3%	55.5%	49.4%	54.7%	51.6%

Table 24 - Percentages of sample by demographic

5.1.2 Participation in interviews

24 managers participated in interviews with the researcher. Details of are in Table 25.

	Office		Rank			
	Police officers	Police staff	Insp.	Chief insp.	Supt.	Chief supt.
What is your current role?						
Geographical Operational Unit	5	2	2	5	0	0
HQ Operational Unit	4	3	4	1	1	1
HQ Policy Unit	4	6	2	5	1	2
Other	0	0	0	0	0	0
How many years have you been in your current role?						
1 year	4	2	1	3	0	0
2 years	5	3	2	3	1	0
3 years	2	2	1	2	0	0
4 years	1	1	0	1	1	1
5 years	0	1	0	1	0	2
More than 5 years	1	2	4	1	0	0
How many people directly report to you?						
None	1	2	1	1	0	0
Fewer than 5	2	3	2	4	1	0
6 to 10	2	3	1	2	0	1
More than 10	8	3	5	4	1	2
Have you had experience as a manager outside the police service?						
Yes	4	7	4	6	1	0
No	9	4	4	5	1	3

Table 25 – Numbers of interviewees by demographic

Interviews were broadly split between participants working in operational or policy units. No participants who answered 'other' for *role* were invited as they may be employed in unique roles

or detached from the force and therefore giving an outlier view not reflected by other managers in the force. Chief inspectors were represented in interviews proportionally more than in the survey. This was also true of managers in policy units. This is possibly explained by them having their own office and being more in control of their work, factors which make it easier for them to commit to engaging in a protracted pre-arranged phone call.

This section sets out the participants in the study and shows that they represent the full range of middle manager ranks and roles in the participating police forces. Before more detailed analysis can be carried out, the sample needs to be tested for bias. This is particularly important as the pilot study suggests that the four ranks may not form a homogenous group. The next section considers this question.

5.2 Middle manager groups

Two factors highlighted by previous research may cause police force middle managers not to be a coherent single group but to split into smaller groups with different views and attitudes. The first is *office*. Police force middle managers comprise both police officers and police staff as discussed in chapter 4. The differences of role, experience, powers, pay and conditions of service, make it likely that the view of police staff managers will differ from their police officer colleagues. This would accord with the idea of Burgess and Currie (2013) about hybrid managers, who combine professional and managerial responsibility, engaging more in strategic activity.

The second factor is *rank* which was raised in interviews during the pretesting and highlighted in the pilot study. The four ranks included in the study encompass a range of roles and responsibility and Floyd and Lane (2000) propose that managers in the middle levels of organisation may split into 'middle managers' and more junior 'operating managers'. This section explores both of these factors and how they affect the manager's perceptions of strategic influence and engagement in divergent strategic activity. It concludes that, within police forces, the definition of middle manager used does not demarcate a single group. The data support the view that there are actually two distinct groups within those traditionally viewed as middle managers.

This study uses a definition of middle manager stated by Wooldridge et al. (2008) of, *"below top management and above first line supervisor"* (p 1192). This definition has been widely used in middle manager research and emphasises the importance of the position giving, *"access to top management coupled with their knowledge of operations"*. Within this definition, a distinction between higher and lower levels of middle manager is posited by Floyd and Lane (2000) but previous empirical studies have not explored this. One reason why previous research has not tested whether middle managers so defined actually form a single group may be because most studies look across a number of companies. It is difficult comparing roles and specific levels or hierarchy between different organisations and industries.

The responsibilities of the four levels of hierarchy in the middle of organisations are broadly consistent between different police forces. Responses from a number of forces can therefore be compared allowing a larger sample to be studied and the homogeneity of the group to be looked at more closely.

Homogeneity of the group is tested by looking for sample bias in the responses relating to the dependent variables. One focus of the current study is to explore the antecedents of the managers' engagement in *divergent activity*, the perception of their *influence* on force strategy, and the *performance* of the force. The following sections use these endogenous variables to consider how the views of respondents are influenced by *office* or *rank*.

5.2.1 The effect of office on middle manager views

The division of personnel between sworn police officers with unique legal powers, and unsworn police staff is a potential source of difference in culture and approach to work. The difference may be similar to the divisions between managers and professionals found in a professional bureaucracy like the UK NHS. The work of police officers and police staff has converged in the past 20 years as non-sworn staff have taken on more operational roles, but differences remain between the groups in terms of role, training, regulations, salary and powers. Figure 17 shows this and details the sample broken down by *office* and *role*. 79.4% of the police officers are part of an operational command unit (geographic or HQ) whereas this is true for only 42.8% of police staff.

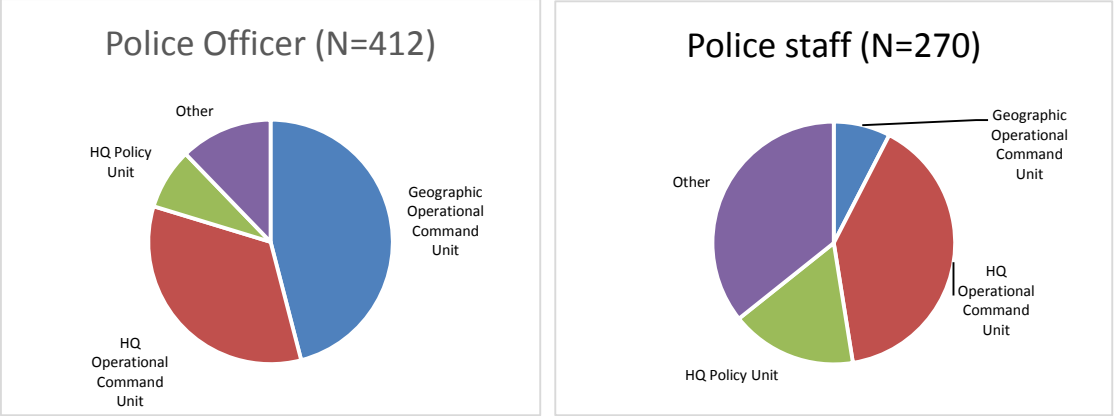


Figure 17 – Roles of police officer and police staff respondents

Independent samples t-tests show a small (Cohen, 1988) but statistically significant difference in the dependent variable (*performance*) score between police officer and police staff respondents, but no significant difference for the other three endogenous variables. Results are in Table 26.

Variable	t	N	Sig. (two-tailed)	Eta^2
Performance	-3.000	676	.003	.012
Championing alternatives	-1.191	682	.234	.002
Facilitating adaptability	.363	682	.717	.000
Influence	.704	681	.482	.000

Table 26 - Independent sample t-test for dependent variables

Police staff on average have a higher view of the performance of the force than their police officer colleagues. This difference of view may be explained by the broad difference in role described above. Police officers may have a more operational focus on outputs like crimes solved and numbers of arrests. In comparison police staff, who will predominantly be in more supporting roles, may have a broader view of performance including measures of efficiency. The difference however is small (Eta^2= .012) following the guidelines of Cohen (1988), so the difference between the groups appears to be of little practical significance.

These data suggest that there is no important difference between police officers and police staff managers in their view of their strategic role. This is surprising for two reasons. First, differences in role and employment conditions between police officers and police staff described in chapter 4 may be expected to contribute to a greater divergence of view between

the two groups. Second, this questions the distinction between hybrid and other middle managers recognised by Burgess and Currie (2013). This is further discussed in this chapter when the level divergent activity of middle managers is analysed further. Having established that *office* is not a significant influence on the views of police force middle managers, the following section examines the effect of *rank*.

5.2.2 The effect of rank on middle manager views

Historically within the police service, the four levels of management included in this study have not been viewed as similar. Evidence of this can be found in the staff association for inspectors and chief inspectors being the Police Federation where they are grouped together with constables and sergeants. Superintendents and chief superintendents have a separate staff association. Additionally, for the purposes of training, inspector and chief inspector have been informally separated from superintendents and chief superintendents.

Some police inspectors also differ from their more senior colleagues in working shifts and being responsible for the operational work of a team of sergeants and constables rather than a function of the whole command unit. More recently this difference has reduced as the number of middle managers in the police service has decreased[10]. This has resulted in increased responsibility for inspectors, a factor noted by managers interviewed for this study.

> *"In the past eight years, the responsibility on inspectors has grown a lot. Flattening the organisation I think they call it."*
> Police officer, inspector level. Geographical command unit.

> *"Most forces are decreasing the number of middle managers. In* [one force] *chief superintendents have gone from 14 to 4, superintendents from 60 to 25. Responsibility is being pushed downwards."*
> Police officer, chief superintendent level. HQ policy unit.

A police chief superintendent suggests that this reduction in management positions has resulted in a change in perception of rank and hierarchy in police forces. Other managers

[10] Between 2003 and 2014 the total number of police officers in English and Welsh forces rose by 11%. In the same period the total number of police officers in the ranks inspector to chief superintendent fell by 4%. (Source: https://www.gov.uk/government/collections/police-workforce-england-and-wales, accessed 10th March 2015)

challenge this perception and this factor is examined further in section 5.4 in relation to how it influences levels of divergent activity.

> *"Probably the police chief inspectors would need to go up the line of command still – but it is getting more informal. The previous chief said they were happy for people to call* [them by their first name] *but some police officers found this difficult. I think the new chief will more formal in this way, which will be welcomed. But overall the rank structure is becoming less formal.* [The force] *lost a lot of superintendents. Things have to change."*
>
> Police staff, senior operational manager. HQ policy unit.

The Association of Chief Police Officers describes the inspector rank as *"usually tak*[ing] *more of a strategic, rather than an operational role"* (ACPO, 2012). There appear however to be different views about the strategic role of inspectors in some police forces. One force approached to participate in the survey for this study would not allow inspectors to participate, suggesting that the subject was not appropriate to that level of manager. Also, one more senior manager interviewed stated,

> *"I would not want my chief inspector to think strategically. That is not his job."*
>
> Police officer, chief superintendent level. HQ command unit.

One-way analyses of variance show that rank significantly explains variance in the endogenous variables *influence*, *championing alternatives* and *facilitating adaptability*, but does not explain the variance in *performance*. Results are in Table 27.

Variable		Sum of squares	df	Mean square	F	Sig.	Eta^2
Influence	Between groups	212.845	3	70.948	30.399	.000	.117
	Within groups	1591.746	682	2.334			
	Total	1804.590	685	.			
Championing alternatives	Between groups	45.309	3	15.103	26.789	.000	.105
	Within groups	386.196	685	.564			
	Total	431.506	688				
Facilitating adaptability	Between groups	38.947	3	12.982	26.402	.000	.104
	Within groups	336.821	685	.492			
	Total	375.768	688				
Performance	Between groups	3.317	3	1.106	1.321	.267	.006
	Within groups	566.739	677	.837			
	Total	570.056	680				

Table 27 - One-way ANOVA of impact of rank

In addition to being statistically significant, the Eta^2 calculation shows that the difference between means is medium to large (Cohen, 1988). Post-hoc comparisons using the Games-

Howell test, recommended by Field (2009) where groups are of unequal size, indicate that the mean scores for chief inspector and superintendent ranks are not significantly different while those for inspector and chief superintendent ranks differ significantly from the other groups. These results are summarised in Table 28 and Figure 18.

	Influence		Championing alternatives		Facilitating adaptability	
Rank	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
Inspector or police staff equivalent	2.554	1.445	3.357	.777	3.110	.709
Chief inspector or police staff equivalent	3.086	1.612	3.791	.702	3.469	.685
Superintendent or police staff equivalent	3.663	1.699	3.875	.701	3.567	.697
Chief superintendent or police staff equivalent	4.774	1.627	4.129	.707	3.934	.621

Table 28 - Comparative means of endogenous variables by rank

This suggests that perception of *influence* increases with *rank*, as does the level of divergent strategic activity. However, the data also show that respondents at chief inspector and superintendent level have similar views of their strategic activity. See Figure 18.

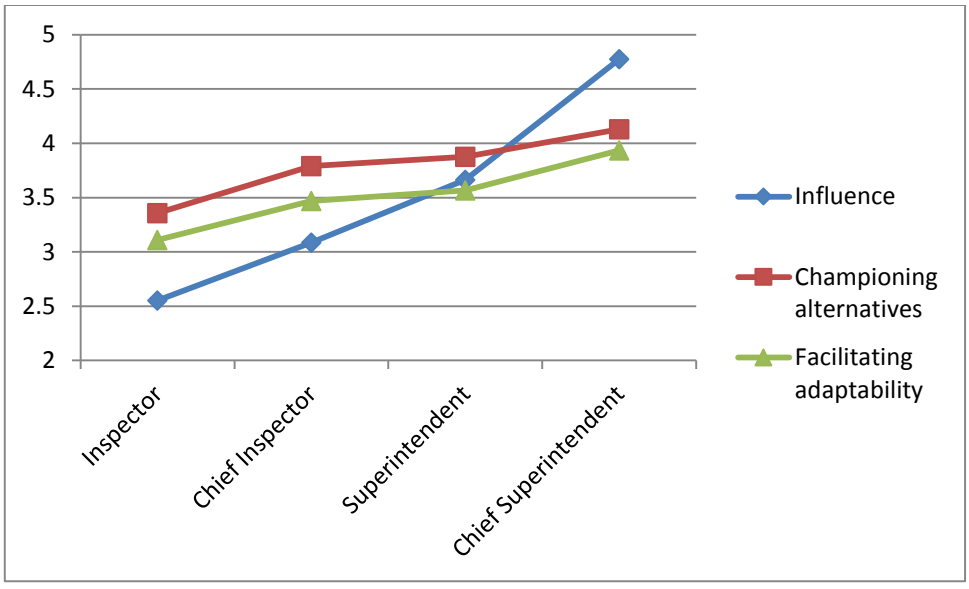


Figure 18 - Mean results for Influence, championing alternatives, and facilitating adaptability by rank

Controlling for the influence of *role* by looking only at managers working on geographical command units, the impact of rank is still apparent. A one-way analysis of variance shows that *rank* has a large effect (Cohen, 1988) on the *divergent activity* and *influence* variables. Results are shown in Table 29.

Variable		Sum of squares	df	Mean square	F	Sig.	Eta^2
Influence	Between groups	41.294	3	13.765	6.102	.001	.082
	Within groups	464.697	206	2.256			
	Total	505.981	209				
Championing alternatives	Between groups	18.050	3	6.017	10.277	.000	.130
	Within groups	120.602	206	.585			
	Total	138.651	209				
facilitating adaptability	Between groups	14.882	3	4.961	10.414	.000	.132
	Within groups	98.121	206	.476			
	Total	113.003	209				
Performance	Between groups	2.337	3	.779	.801	.495	.012
	Within groups	198.432	204	.973			
	Total	200.769	207				

Table 29 - ANOVA results for impact of rank for respondents working in geographical command units

These data show that once the impact of *role* has been removed, there are significant differences between inspectors and managers at other ranks. This reinforces the view that inspectors as a rank should not be grouped together with more senior middle managers as they have a different view of their strategic role. The results also confirm the similarity in the responses of managers at chief inspector and superintendent ranks. (See Figure 19)

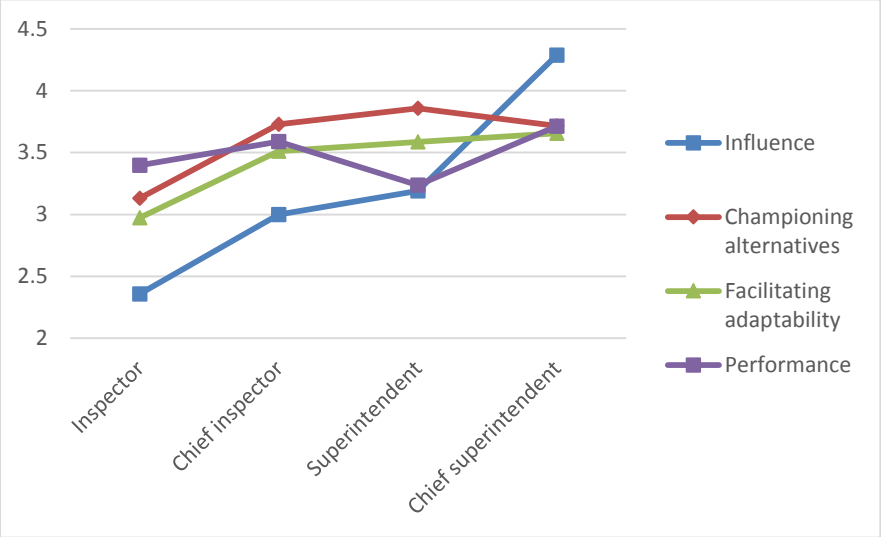


Figure 19 – Mean results for dependent variables by rank for respondents working on geographical command units

The middle managers in this study divide into sub-groups related to *rank* and the analysis needs to take account of this. Having established this, the difference between the groups of middle managers needs to be better understood before the hypotheses can be considered. This is particularly relevant to research question 2 which relates to how *strategy development profile*

impacts on *middle manager divergent activity*. The next section discusses in more detail how the two groups differ by looking at their perception of the *strategy development profile*.

5.3 Exploring the difference between middle manager groups

Having identified differences between groups in the sample due to *rank*, this section looks more closely at the difference between the groups responses in relation to the independent variables included in the study. Through this, more insight can be gained into differences of view between the groups.

5.3.1 Strategy development profile

The strategy development profile construct is based on a scale of 39 items validated by Bailey et al. (2000). The original construct identifies six dimensions of how strategy develops in organisations. These are:

- **Command** – where strategy is directed by a senior person in the organisation;
- **Planning** – where strategy is decided as a result of detailed analysis of environmental factors leading to explicit plans and objectives;
- **Enforced choice** – where powerful stakeholders or events outside the organisation limit the freedom of the organisation to decide its strategy;
- **Culture** – where the organisational culture influences the strategies being made;
- **Incremental** – where strategies result from a series of small steps;
- **Political** – where strategies are influenced by the power of individual people or groups within the organisation.

Exploratory factor analysis of the 39 items in the SDP scale produced conflicting results between managers at inspector level and those at chief inspector/superintendent level. Results for the inspector rank replicate the six dimensions of strategy development defined by Bailey et al. (2000). Results for chief inspectors and superintendents suggest that this group sees strategy development through five dimensions. These dimensions are similar to the original model but show a significant difference in relation to ideas about the influence of *command*, *politics* and *enforced choice* in strategy development. Full details of the results of the exploratory factor analyses appear in Appendix I.

5.3.1.1 Inspector level managers

The responses from inspector level managers replicated the dimensions described by Bailey et al. (2000). The Cronbach's α scores for each dimension are shown in Table 30. All of the variables exceed .6 which Hair et al. (2010) suggest is acceptable for exploratory research. The score for *command* is significantly lower than that found by Bailey et al. which may suggest a different perception about the importance of *command* among managers in police forces than more generally in private sector companies which formed the major part of Bailey et al's (2000) sample.

	Inspector level managers	**Bailey et al. (2000)**
Command	.612	.80
Planning	.89	.89
Enforced	.717	.80
Culture	.687	.71
Incremental	.711	.63
Political	.786	.78

Table 30 – SDP variables Cronbach's α for inspector level respondents

5.3.1.2 Chief inspector and superintendent level managers

The results for chief inspector and superintendents level managers do not replicate the original model. This group of managers do not see *command*, *political* and *enforced choice* as single dimensions. They see each as splitting into two parts which broadly can be described as positive or negative. The positive aspects of *command* combine with the eight *planning* items to form a new scale focused on structured rational working. The negative aspects of *command* combine with negative aspects of *politics* to form a dimension focused on *power-play*. The positive aspects of *politics* combine with items from the *incremental* scale to form a new dimension focused on *partnership* working. Original *enforced choice* items split into those relating to where strategy is imposed on the force, and those which are an unavoidable part of being a public sector organisation. This gives the five dimensions shown in Figure 20. These new SDP variables for chief inspector and superintendent level managers are described below.

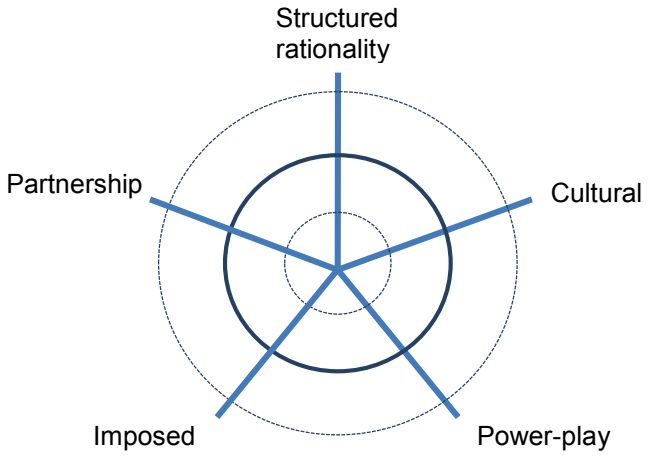


Figure 20 – Five dimensions of strategy development profile. Chief inspectors and superintendents.

Dimension 1 – Structured rationality

The eight *planning* items of Bailey et al. (2000) combine with two *command* items. These are:

sdp1comm	A senior officer's vision is our strategy.
sdp8comm	The chief constable determines our strategic direction.

The two items shown above relate to the actions of chief officers which are seen as a natural part of the planning process.

This accords with the experience of the researcher that formal leadership based on rank is accepted as an important part of the effective working of a police force. A planning process which is not guided by the chief constable is not seen as an effective process. Therefore leadership of the chief officer is an integral part of strategic planning in police forces. However, as found by Kirkhaug (2009), even in compliance-enhancing organisations like police forces, the action and direction of the chief officer can sometimes be seen as negative, unhelpful or damaging to the effectiveness of the force. This is where it is thought to be arbitrary or constraining the operational work. This aspect of command is considered under dimension 3 (*power-play*) below.

Dimension 2 – Cultural

This dimension replicates the cultural dimension of Bailey et al. (2000) and describes where the organisational culture influences the strategic decision being made.

Dimension 3 – Power-play

This dimension captures where position, power and influence is not a natural part of being a public sector and disciplined organisation. It is about the influences on strategy development which can be negative and which need managing, or avoiding. This has three aspects. The dimension extracts the more negative aspects of the *political* dimension and combines these with items from the original *command* and *enforced choice* dimensions.

First, it includes the *political* items which concern the way that power is used to block or impose strategies. These are:

sdp21pol	The vested interests of particular internal groups colour our strategy.
sdp30pol	Our strategies often have to be changed because certain groups block their implementation.
sdp39pol	The decision to adopt a strategy is influenced by the power of the group sponsoring it.

The important point is not that power plays a part in strategic decision making. It is about how that power is exercised. Some politics is inherent when different parts of the organisation with differing levels of power have to work together to respond to the need for change. This is accepted as an effective way of working and is considered under dimension 5 – *partnership*. However, power which is used in a way which only supports the interests of the powerful group and does not benefit the organisation is seen as an abuse of that power.

Second, the power-play dimension includes the items of *command* which concern the imposition of strategy by an individual when it is not seen as guided by a rational process or consultation. These items are:

sdp33comm	Our strategy is closely associated with a particular individual.
sdp35comm	Our chief constable tends to impose strategic decisions (rather than consulting with the top management team).

Third, *power-play* is revealed in the way it constrains decision making. This is different to the existence of laws, regulations and government direction which the police forces have to work within, and which is included in the *imposed* dimension considered below.

sdp3enf	We are not able to influence our working environment – we can only buffer ourselves from it.

sdp34enf	Barriers exist in our environment which significantly restrict the strategies we can follow.

Dimension 4 – Imposed

This dimension broadly replicates the *enforced-choice* dimension of Bailey et al. (2000) and incorporates five of the original items. It describes how powerful external stakeholders (e.g. the government) or events effectively determine aspects of the strategy of the force.

Dimension 5 – Partnership

This dimension has some aspects of the *political* dimension and combines these with items from the *incremental* dimension of Bailey et al. (2000). It highlights how strategy develops through the gradual process of 'give and take' of bargaining with partners, both inside and outside the force.

First, the dimension incorporates two items from the *political* dimension. These are:

sdp6pol	Our strategy is a compromise which accommodates the conflicting interests of powerful groups and individuals.
sdp9pol	Our strategy develops through a process of bargaining and negotiation between groups or individuals.

These items highlight the inevitable political aspect of people working together. Police forces are machine bureaucracies (Mintzberg, 1979) split into many departments and units. The purpose and objectives of police forces are diverse and resources for all parts of the organisation come from a single central source. Collaboration and negotiation is an inevitable part of good strategic decision making.

Second, the three items from the *incremental* dimension emphasise how working in partnership requires flexibility as different policies and priorities need to work together. These are:

sdp5inc	Our strategy develops through a process of ongoing adjustment.
sdp16inc	Our strategy is continually adjusted as changes occur in our environment.
sdp31inc	We keep early commitment to a strategy tentative and subject to review.

5.3.1.3 *Five dimensions of strategic development*

The five dimensions found in this study suggest an approach to strategy development by some middle managers in police forces which sees *command*, *political* and *enforced choice*, as having two quite separate aspects or implications.

Figure 21 summarises the relationship between the original dimensions of Bailey, Johnson and Daniels (2000) and the five dimensions for chief inspectors and superintendents in the current study.

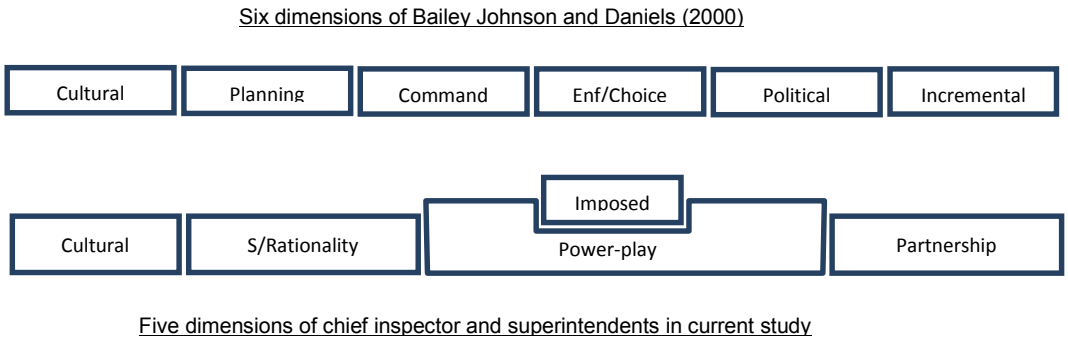


Figure 21 - Relationship between dimensions of Bailey, Johnson and Daniels (2000) and the current study

A summary of the five dimensions of *strategy development profile* found through this study are described in table 31 which includes the Cronbach's α indicators of reliability of the new scales.

Dimension	Description	Cronbach's α
Structured Rationality	This combines the elements of planning recognised by Bailey et al. (2000) but includes aspects of the chief constable playing a central and active role in the development of strategy.	.860
Power-play	This comprises the ways that power is used by individuals or groups inside or outside the force to influence the adoption and success of strategies in the interest of that group.	.801
Imposed	This is very similar to the Enforced choice of Bailey et al.(2000) and comprises the aspects of central and local governance which the police have to work within.	.741
Culture	This is the same as the dimension described by Bailey et al. (2000) and comprises ideas about how organisational culture influence the choice of strategy.	.689
Partnership	This comprises the ideas about strategy developing incrementally and includes the ways that different objectives and requirements are balanced.	.555

Tables 31 - Strategy development profile dimensions from current study – chief inspector and superintendents

Four of the dimensions have a Cronbach's α over .6 which Hair suggests is acceptable for exploratory research. The *partnership* dimension has a Cronbach's α of .555 which questions the reliability of that dimension. However, this dimension is only formed of five items and Briggs and Cheek (1986) suggest that for scales with few items, the mean inter-item correlation is a more helpful test of reliability. In this case the mean inter-item correlation for the

partnership dimension is .205 which falls between the recommended range of .2 and .4 suggested by the authors as showing acceptable reliability.

5.3.2 Levels of middle manager

All four levels of manager included in the sample fit the definition of middle manager set out by Wooldridge et al. (2008) and which is used in other studies. This is that they are all below executive management level and above first-line supervisor. The data in this study suggest that, within the police service, this definition does not describe a homogenous group in relation to strategic activity and influence. The results of this study suggest that chief inspectors and superintendents perform similar activities and have similar perceptions about their strategic role. They should be seen as a single group of senior operational managers.

This group of senior operational managers is different to managers at inspector level who view their role and strategic management from a more operational perspective. This may suggest that as a group they have characteristics which align them more with Floyd and Lane's (2000) idea of operational managers who are more focused on the implementation of strategy. However, it is clear that they do engage in divergent strategic activity and the value of this and what it means for their role is discussed in section 5.4. Similarly, managers of chief superintendent rank also differ in their strategic activity and influence from chief inspectors and middle managers. However, the number of participants in this group is small (see Table 25) and the value is questionable.

Overall the data suggest that within police forces, middle managers as defined by Wooldridge and Floyd (2008) should be viewed not as a single group, but as part of one of three 'rank-groups' as shown in Table 32.

Organisational Rank	Study Rank-group
Inspector or police staff equivalent	Operational managers
Chief inspector or police staff equivalent	} Senior operational managers
Superintendent or police staff equivalent	
Chief superintendent or police staff equivalent	Senior managers

Table 32 - Sub-sets of middle managers in the police service

Senior managers, comprising police chief superintendents and police staff with similar responsibility are a small group in the sample (N = 31). These low numbers make meaningful analysis of this group problematic and the survey responses of senior managers are not

considered further in this study. The two remaining groups of operational managers and senior operational managers are considered separately in this chapter.

5.3.3 Implications for research questions of middle manager groups

The difference between the two middle manager groups in this study suggests that it is not only the level of strategic activity which depends on *rank*. Views about how the processes of strategy work are also contingent on the level of the manager in the organisation. Further, it may suggest that the context of the police service results in a different view about strategy development from those of managers in other organisations.

This is particularly relevant for research question 2 which asks how the strategy development profile of an organisation influences the divergent activity of middle managers. Understanding the different ways in which managers view strategy development allows better interpretation of any influence found and helps question the relevance of results of studies in other contexts.

5.4 Engagement in divergent strategic activity

Having established how the sample in this research divides into two separate groups, this section considers the level of divergent activity reported by the managers involved in the study. All of the research questions concern this aspect of *middle manager divergent activity* and it is important to understand the level of the activity before analysing the interactions between the study variables.

Police managers of all ranks involved in the study engage in divergent strategic activity. Both levels of middle manager engage more in *championing alternatives* to senior managers than *facilitating adaptability* in their staff. This relative emphasis on *championing alternatives* is also reported by Floyd and Wooldridge (1992) in a large study of US managers in a range of industries. That study also finds that the relative upward focus associated with *championing alternatives* is not affected by the strategic approach of the firm. This may suggest that middle managers in all organisations are less drawn to the experimental approach associated with *facilitating adaptability*. Also the formal structures of meetings and processes of organisations may not encourage managers to experiment. This idea is discussed later in this section in relation to senior operational managers.

Overall, in police forces, the level of divergent activity increases with *rank*. Operational managers engage in significantly less divergent activity than senior operational managers. (See Table 30) The medium to large difference (Cohen, 1988) between ranks may be more easily explained in relation to *championing alternatives*, as junior middle managers may be more limited in their access to top management as is supported by a police chief inspector.

> *"[Even] as a chief inspector my exposure to the chief constable is when things have gone particularly well or badly."*
>
> Police officer, senior operational manager. Geographical command unit.

The difference between the ranks for *facilitating adaptability* cannot be explained so simply and may expose a more fundamental factor influencing the manager's views about their respective strategic roles or the context of the police force.

5.4.1 Level of divergent activity of operational managers

Divergent activity of operational managers is not affected by *office*. See Table 33. The similar level of divergent activity of police officers and police staff at this *rank* does not support the ideas of Burgess and Currie (2013) that hybrid managers, who possess both professional and managerial knowledge, engage in more strategic activity.

Variable	t	N	Sig. (two-tailed)	Eta^2
Championing alternatives	-1.95	403	.052	.009
Facilitating adaptability	-.149	403	.882	.005

Table 33 - Independent sample t-test for influence of office on divergent activity – operational managers

The professional knowledge and experience of police officer managers at this level does not encourage them to play a more active strategic role. Further analysis shows that the difference between police officer and police staff operational managers also appears not to be influenced by role. Figure 22 shows how the mean values of championing alternatives for operational managers varies between different roles but reveals a close similarity between the two groups.

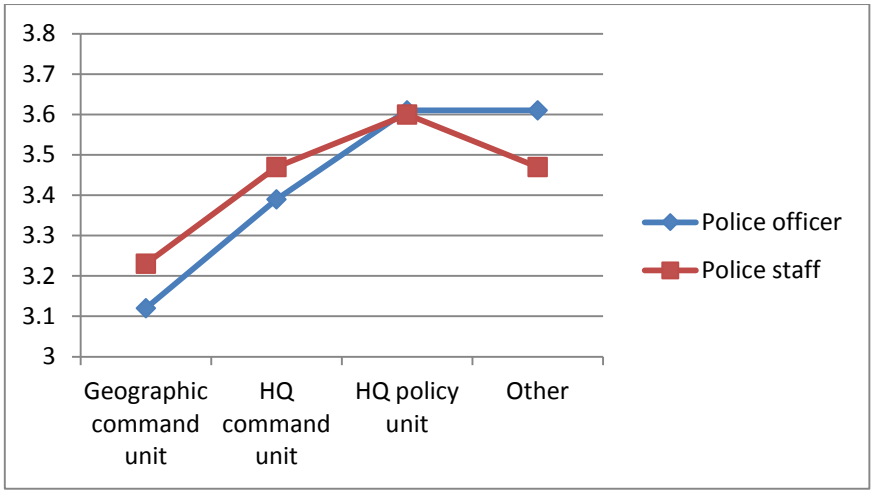


Figure 22 – Mean scores for championing alternatives by role and office – operational managers.

An explanation for the similarity between police officers and police staff may be associated with their perceived low level of *influence* of operational managers. See Figure 18. Operational managers are at least five levels of hierarchy from the chief constable, and may therefore feel that they have little influence regardless of whether they are police officers or police staff. Despite the increased responsibility and the ACPO view that operational managers should think more strategically, both police officer and police staff respondents at this level perceive that managers of their rank are listened to sufficiently.

> *"At the lower level you do not have much influence. Your view is not listened to very much. I do not think that this is right. Your view should be listened to more."*
> Police staff, operational manager. Geographical command unit.

> *"I ought to be* [listened to] *slightly more. I am not suggesting that someone of this level should be wholly influential but we should be listened to more. Consulted possibly."*
> Police officer, operational manager. HQ command unit.

These views suggest that their lack of engagement in divergent activity relates to more senior managers not involving them directly. The idea that this is a structural issue is supported by a police staff senior manager.

> *"I think that inspectors see themselves as treated quite badly in some forces. They are more like sergeants. They are not seen as part of the management team. It*

would not surprise me if they thought they were not involved enough. We have a generation of inspectors who are treated as supervisors."

Police staff, senior manager. HQ policy unit.

As well as suggesting that inspector level managers are not treated as middle managers in some police forces, the view of this manager also implies that this is a current issue. The "*generation of inspectors*" has come about as a result of the way that the role of inspectors has developed in the recent past. This view about the position of inspectors however is questioned by a police inspector who highlights the role of line management and particularly their senior operational managers as their link with top management.

"It depends on you having good managers. Good superintendents. There is a consultation process through which you can use your experience."

Police officer, operational manager. HQ command unit.

While this is a more positive view about the ability of operational managers to be involved in strategic activity, it still suggests that it is a passive position relying on senior managers to consult.

The perceived lack of influence of this level however may not be due to a failure of more senior managers to listen or act as a conduit. It may also be a factor of the demands of the operational manager level being inevitably more about dealing with the immediate operational considerations.

"I spent a short time as a community policing inspector[11]. Most of the work focused on the immediate environment – my sergeants and constables. There was very limited input to the strategic direction of the force."

Police officer, operational manager. HQ command unit.

"…in relation to [my freedom to change things], on a scale of one to ten I would give myself a three. You have to take into account the size of the unit I have. There is little time to think about changing things."

Police officer, operational manager. Geographical command unit.

[11] This involves leading a team of sergeants and constables engaged in all types of service delivery on a geographical command unit.

The fact that the above views about limited engagement are from operational managers in geographical and HQ command units also exposes the influence of *role* for this level of manager. Managers in command units report a lower level of divergent activity (Table 34).

	Championing alternatives		Facilitating adaptability	
Role	**Mean**	**SD**	**Mean**	**SD**
Geographical command units	3.132	.810	2.973	.744
HQ command units	3.428	.762	3.113	.669
HQ policy units	3.600	.592	3.228	.740
Other	3.521	.723	3.282	.668

Table 34 - Comparative means of divergent activity variables by role – operational managers

A one-way ANOVA reveals *role* has a medium to large (Cohen, 1988) influence on divergent activity. Post-hoc comparisons using the Games-Howell test, recommended by Field (2009) where groups are of unequal size, indicate that the mean scores for managers on geographical command units are significantly different from other roles. These results are summarised in Table 35.

Variable		Sum of squares	df	Mean square	F	Sig.	Eta^2
Championing alternatives	Between groups	12.654	1	4.218	7.305	.000	.051
	Within groups	230.957	400	.577			
	Total	243.601	403				
Facilitating adaptability	Between groups	6.219	1	.011	2.073	.006	.031
	Within groups	197.270	400	.506			
	Total	203.490	403				

Table 35 – One-way ANOVA of impact of role on divergent activity variables – operational managers

Operational managers working in geographical command units report the lowest level of divergent activity of all the managers studied. Police officer managers in this group, who form the majority of managers on geographical command units, are responsible for a key service delivery role for the police service and significant resources. In this study, three-quarters of the police officer managers in this role said they had more than 10 staff reporting to them.

These findings question the relevance of previous studies to the police force context. Roles in geographical command units are boundary-spanning (Floyd and Lane, 2000) as they link the organisation with the customer. Police officers in these roles are also hybrid managers (Burgess and Currie 2013) in that they are responsible for managing resources but also need operational expertise. Both of these characteristics of roles are seen in other studies to encourage a higher level of strategic activity. The fact that the data in this study do not support these findings suggests that it is not aspects of the role which constrain managers undertaking strategic

activity. There is a need to look elsewhere in the police force context for the factors influencing these managers.

Operational managers in police forces are unclear about their strategic role. These data question whether they should be seen as middle managers in the way defined by this study. Floyd and Lane (2000) suggest there is a junior level of middle managers in organisations focusing more on the operational issues. However, this is not an operational supervisor position. Despite these managers having a more junior role, Floyd and Lane (2000) still suggest that their work should involve experimentation.

5.4.2 Level of divergent activity of senior operational managers

In contrast to operational managers, senior operational managers report more engagement in divergent activity and there is a small difference in the level of engagement of police officers and police staff. Independent samples t-tests show that this difference is significant but small (Cohen, 1988). Tables 36 and 37 show the results broken down by *office.*

	Championing alternatives		**Facilitating adaptability**	
	Mean	**SD**	**Mean**	**SD**
Police officers	3.91	.67	3.59	.65
Police staff	3.70	.74	3.38	.73

Table 36 – Mean values of divergent activity variables by office – senior operational managers.

Variable	**t**	**N**	**Sig. (two-tailed)**	**Eta^2**
Championing alternatives	2.312	248	.022	.021
Facilitating adaptability	2.275	248	.024	.021

Table 37 - Independent sample t-test for influence of office on divergent activity – senior operational managers

For senior operational managers, this difference between police officer and police staff managers is not influenced by *role* (Table 38). This suggests that it may be the result of the variations between the group's employment conditions and experience discussed in chapter 4.

Variable		Sum of squares	df	Mean square	F	Sig.	Eta^2
Championing alternatives	Between groups	.410	3	.137	.273	.865	.003
	Within groups	120.563	241	.500			
	Total	120.973	244				
Facilitating adaptability	Between groups	.353	3	.118	.242	.867	.003
	Within groups	116.933	241	.485			
	Total	117.285	244				

Table 38 – One-way ANOVA of impact of role on divergent activity variables – senior operational managers

Figure 23 shows the mean scores for facilitating adaptability for senior operational managers. This shows police officers reporting significantly more divergent activity in all roles. Although the difference is small, these data challenge the findings of previous studies questioning their relevance to the police force context. First, in this study, police staff senior operational managers have markedly longer in post that their police officer colleagues. Floyd and Wooldridge (1992) suggest that managers who have been longer in their current posts would engage in more divergent activity. Additionally, police staff managers are more likely to have had experience as a manager outside the police service which Raman (2009) finds as a factor in exhibiting more strategic activity. See Table 39 which shows the mean values of these variables broken down by *role*. The divergent activity of police officers compared to their police staff colleagues may support the ideas of Burgess and Currie (2013) about the hybrid managers engaging more because of their particular knowledge and experience.

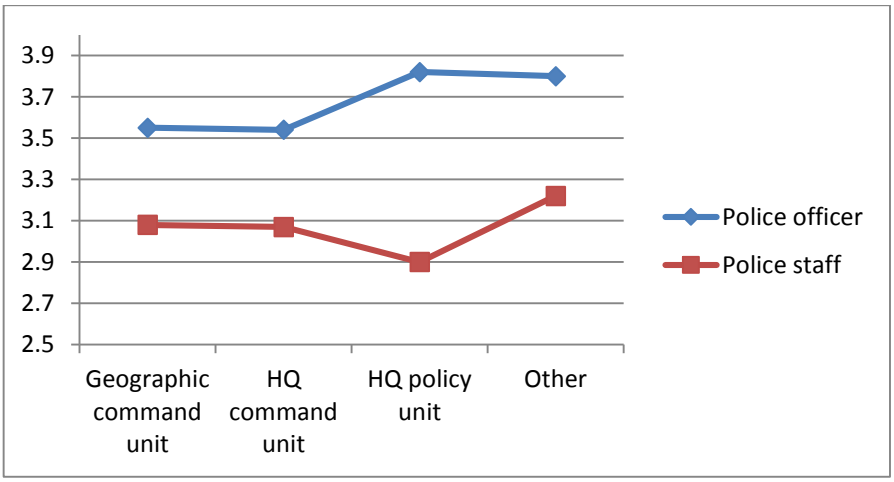


Figure 23 – Mean scores for facilitating adaptability by role and office – senior operational managers.

	Tenure[12]		Experience	
	Police officer	**Police staff**	**Police officer**	**Police staff**
Geographical command unit	2.76	4.00	1.69	1.60
HQ command unit	1.93	5.03	1.69	1.42
HQ policy unit	1.73	3.66	1.55	1.24
Other	1.67	4.51	1.67	1.29

Table 39 – Mean value of *tenure* and *experience* broken down by *office* and *role*.

Senior operational managers suggest that they engage in high levels of *divergent activity*. The examples that they give, however, suggest that this activity may be predominantly constrained to using the more formal structures of engagement within police forces.

> *"*[The force] *is very good at innovating and looking at things differently. I put in a suggestion* [into the force suggestion scheme] *recently. I didn't think it would get anywhere but it was very well received."*
>
> Police staff, senior operational manager. HQ policy unit.

> *"There is a senior level forum twice a year where we get asked for our views and what is important. I feel they do ask and they do listen."*
>
> Police officer, senior operational manager. Geographical command unit.

> *"But generally people can have an influence if they are interested. There is more consultation than there used to be. Every station has 'Shaping the Future' workshops."*
>
> Police staff, senior operational manager. Geographical command unit.

The focus on formal structures of consultation question the extent to which the divergent activity is associated with the sort of autonomous behaviour seen as valuable by Andersen (2000) or Mantere (2008). However, not all senior operational managers see the effectiveness of these processes.

> *"Twice a year there is a conference where* [the chief constable] *meets all the managers. It is there* [the chief] *talks about their vision and we are consulted.*

[12] Experience and tenure are categorical variables as described in Chapter 3. The figures are intended for comparative purposes.

However, we don't see the working so much. Even my superintendent would not have a direct input into what the strategy should be. You have little influence. Overall the strategic direction is clear to us, but it is after the fact. It has already been decided – at HQ."

Police officer, senior operational manager. Geographical command unit.

Notwithstanding questions about their effectiveness, the structures and processes referred to here are all about how managers can put forward their opinions. This may explain why managers engage more in *championing alternatives* than *facilitating adaptability*. Examples of structures and systems which encourage the experimental approach essential *to facilitating adaptability* are rarer. However, some respondents felt that they did have some autonomy to experiment.

"I feel that I have a fair amount of autonomy to get the job done, I recently set up a new protocol with mental health. I did not have to pass that by the chief inspector or superintendent. I am treated as a professional. I expect that this is less so for a patrol inspector. I have more influence to do things."

Police officer, senior operational manager. HQ command unit.

"Yes, I have authority. I am left to do things as I see fit as long as I deliver. I had a recent conversation with a senior officer who said I should think about what I could do to change the organisation. So this is permission to do things differently. I am in a role where it is possible to make a difference across the force. This may be less possible in other roles and certainly more difficult for more junior ranks."

Police staff, senior operational manager. HQ policy unit.

It is probably important that both of these respondents work in specialist roles and comment that their views may not be applicable to more junior or operational managers. This may support the findings of Meyer (2006) who suggests a distinction and tension between managers in operational roles and those in support roles.

5.4.3 Implications for research questions of middle manager divergent activity

This section shows how *rank* has a significant influence on a manager engaging in *divergent activity* in the police forces studied. The data here also do not support the ideas about the influence of *role* (Floyd and Wooldridge, 1997; Regner, 2003), experience (Raman, 2009) or

tenure found in other studies. Despite the different roles, levels of experience and expertise, *rank* remains a dominant factor in explaining the level of *divergent activity*. This has two implications for the research questions in this study. First, it adds to the question raised in section 5.2 about whether operational managers should be seen as middle managers or a completely separate group as suggested by Floyd and Lane (2000). Second, any analysis of how divergent activity relates to other variables in a police force needs to consider how the rank structure influences the context. In police forces rank often determines who will be present in meetings or receive information. Emphasis on the formal structures of strategic activity in the organisation explains why more senior managers are more engaged in divergent activity. The next section looks at the salience of external stakeholders.

5.5 External stakeholder salience

Stakeholder salience is assessed through combining perceptions of *power*, *legitimacy* and *urgency* (Mitchell et al., 1997) for seven internal and external stakeholders. Four stakeholders internal to the organisation and three external stakeholders cover the full range of stakeholder influence on the strategy of police forces. The overall results from the survey are shown, broken down by *rank*, in Table 40.

	Operational managers		Senior operational managers	
Internal stakeholders	**Mean**	**SD**	**Mean**	**SD**
Force ACPO team	4.54	.68	4.60	.44
Operational police officers	3.29	.63	3.28	.58
Staff Associations	3.21	.68	3.23	.67
Police staff	3.02	.67	3.08	.62
External stakeholders				
Police and Crime Commissioner	4.21	.75	4.45	.58
Central Government	4.11	.69	4.13	.64
Crime Reduction Partnerships	3.27	.69	3.21	.67
External salience	3.86	.51	3.93	.43
Internal salience	3.51	.46	3.55	.42

Table 40 – Stakeholder salience

The data shows the force ACPO team, the PCC and central government are seen as having significantly higher salience than the other four stakeholders. This view is consistent across both groups of managers. External stakeholder salience is viewed as stronger than internal, which accords with the views in the previous section about the strength of *imposed* or *enforced choice* dimensions of strategy development in police forces. However, for both groups, the most salient

stakeholder is the force ACPO team, which suggests middle managers see the ability of the force to manage its own strategy, irrespective of the impact of external factors.

Looking more closely at the component parts of salience reveals that external stakeholders are seen as having significantly more *power* than internal stakeholders, despite having less *legitimacy*. Table 41 shows the average level of *power*, *legitimacy* and *urgency*.

	Power		**Legitimacy**		**Urgency**	
	Internal	**External**	**Internal**	**External**	**Internal**	**External**
Police officers	2.90	3.98	4.00	3.97	3.54	3.81
Police staff	3.09	3.95	4.10	3.96	3.69	3.90

Table 41 – Mean levels of power, legitimacy and urgency of internal and external stakeholders

Crime reduction partnerships (CRP) have the lowest salience of the three external stakeholders. They also show a variation between perceived *power* and *legitimacy* but it is opposite to the other two external stakeholder groups. The mean *power* of 2.63 and *legitimacy* of 3.68 suggests that managers do not see this group as influencing to their full potential. Views about *legitimacy* of CRPs fits with the finding in section 5.6 about the *partnership* dimension. This is seen as strong by senior operational managers emphasising the importance of collaboration in strategy development as shown by the views of a police inspector in a specialist role.

> *"I do a lot of work with partners so I am also influenced by the politics in other organisations. As far as I am concerned these are internal groups. Massive influence comes from their expectations."*
>
> Police officer, operational manager level. HQ command unit.

However, the low perception of power of CRPs may be explained through their work often focusing on more local problems.

> *"CRPs were dysfunctional in* [force area]. *There was a potential to hold sway but they were poorly engaged. They shaped the local rather than the strategic. They were not highly influential for strategic level. Force-wide there was no convergent thinking."*
>
> Police officer, senior manager. HQ policy unit.

These data may also explain the lack of engagement in divergent activity of middle managers on geographical command units, discussed in section 5.4. Floyd and Lane (2000) suggest that as

their roles are boundary spanning, this should allow them to engage in more strategic activity. CRPs are a strategic link to the community for local managers. Engagement between local units and CRPs is embodied in statute. If the CRPs are not fulfilling their role in a way which has strategic relevance for the force, managers will be constrained from engaging with force strategy.

An independent samples t-test shows significant differences between operational managers and senior operational managers for their views of the salience of the PCC [t(653)=-4.321 p=.000 (two-tailed)]. Operational managers perceive PCCs as significantly less salient than senior operational managers. This may suggest that operational managers are less directly affected by the work of the PCC. This can be seen in the following comments about how much the PCC directly influences the work of operational managers.

> *"There is little impact of the PCC personally. He influences through the chief constable."*
> Police officer, operational manager. Geographic command unit.

> *"Not noticeably. He is very supportive of the chief. We now have a PCC plan but it has not changed in substance or methodology* [from what was there before]. *Priorities are the same."*
> Police officer, operational manager. Geographic command unit.

> *"Our PCC was part of the police authority. I do not see much of a change. I hear in meetings what the PCC wants but that is just like hearing what the police authority wanted before. It is different because it is a person with whom you can identify rather than a committee. But there has not been much impact."*
> Police officer, senior operational manager. HQ police unit.

> *"It is too strong to say that the PCC has influence* […] *he has set out his role and it does not interfere with operational matters. It seems to work well."*
> Police officer, senior operational manager. HQ command unit.

This final comment relating to the PCC not interfering with operational matters may cast further light on the why operational managers see the PCC as having less salience. It may reinforce the view that operational managers in the police service are actually more focused on local operational considerations, supporting the suggestions of Floyd and Lane (2000). This comment

is also interesting because the manager expresses satisfaction about the lack of interference of the PCC. This possibly supports the average perception of senior operational managers that PCCs have more *power* (mean = 4.77) than *legitimacy* (mean = 4.23).

5.5.1 Implications for research questions of level of external stakeholder salience

Research question 3 relates to the impact of *external stakeholder salience* on *middle manager divergent activity*. The data relating to perceptions of stakeholder salience highlight the importance of three stakeholders. These are the force ACPO team, the force PCC and central government. Two of these are external to the force. This shows that middle managers need to balance the demands of stakeholders both within and outside the force and suggests that external stakeholders have significant influence. The next section will consider perception of strategy development profile.

5.6 Strategy development profile

Section 5.3 explains how the different middle manager levels in police forces have different views about the development of strategy. It particularly identifies differences concerning the *command* and *political* dimensions. For this reason the study uses the original six-dimensional model of Bailey et al, (2000) to analyse the views of operational managers, and a five-dimensional model for senior operational managers. This section uses these frameworks to explore views about the importance of these dimensions in how strategy develops in police forces.

5.6.1 Operational managers' perception of strategy development profile

Figure 24 shows the strategy development profile for operational managers, split between police officers and police staff. The figure shows standardised results of deviations from the mean of the six dimensions. The mean is shown as 0 on the chart and the axis is units of one standard deviation. The profile of the two groups is similar. In particular *planning* is significantly lower than the mean, and *enforced choice* higher.

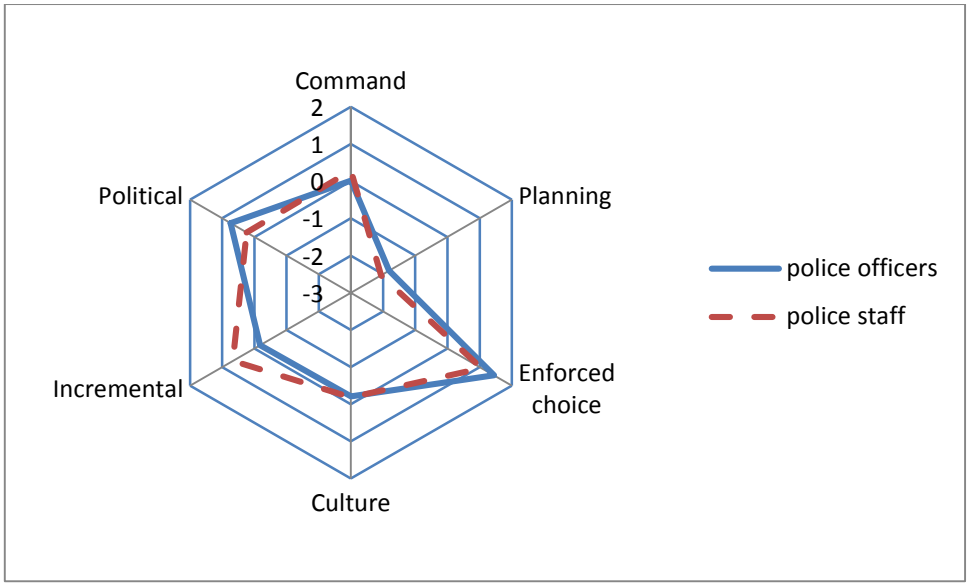


Figure 24 – Strategic development profile by office – operational managers.

In an empirical study, Bailey and Johnson (1995) found that many public sector organisations display a strategy development profile where the *enforced choice* and *political* dimensions are strong, and which the authors label 'External dependent profile'. This is described in Figure 9, chapter 2. Overall the profile for police forces found in this study is broadly similar to the results of this previous work especially in the influence of *enforced choice*. This suggests that in general, operational managers in the police service see strategy development in the same way as managers in other public sector organisations.

	Mean	S.D.	Command	Planning	Enforced choice	Culture	Incremental	Political
Command	3.426	.781	1					
Planning	2.803	.758	**.197****	1				
Enforced choice	3.801	.677	**.129****	-.042	1			
Culture	3.327	.681	**.112***	-.024	**.102***	1		
Incremental	3.418	.671	**.122***	**.390****	.075	**.217****	1	
Political	3.574	.766	**.112***	**-.260****	**.359****	**.346****	.033	1

** correlation significant at the .01 level (two-tailed)
* correlation significant at the .05 level (two-tailed)

Table 42 – Bi-variate correlations for strategy development profile variables – operational managers

The six dimensions are not independent and Table 42 shows their correlations. None of these correlations is large (Cohen, 1988) but the pattern broadly supports the results of previous studies about how the dimensions combine. Bailey et al. (2000) find that SDP variables form

two groups which strongly positively correlate. These are *planning* and *incremental*, and *political*, *enforced choice, cultural* and *command*. Collier et al. (2004) find similar groupings.

The results in this study relating to the *command* dimension do not support the earlier findings which suggest that *command* should correlate negatively with *planning* and *incremental*. Rather, the data show that the *command* dimension has a small but significant positive correlation with all other dimensions. This reinforces the idea, discussed in chapter 5 in relation to senior operational managers, that *command* is viewed differently in the police service which is strongly defined by hierarchy and discipline. It is possible that within a disciplined culture, more junior managers accept the value of *command* as a management style. Instead of challenging the other dimensions, *command* is therefore seen as complementary to the processes through which strategy forms. One police inspector summed up this pervading influence of *command* as the chief constable having the "final say".

> *"The chief constable does not think it up themself.* [They have] *a team of analysts and the* [top team] *discusses. There is consultation. But* [name] *is the chief constable and has the final say. I am not saying that* [they] *come up with it. There is a process."*
>
> Police officer, operational manager. Geographical command unit.

The emphasis in this view on the rank rather than the person is possibly important. It not only reinforces the idea of police forces as machine bureaucracies, it suggests that the view of command in police forces is as a function of the role. It does not necessarily suggest anything about the personal vision, or lack of it, of the post-holder. However there are exceptions as shown by a police staff senior operational manager referring to the chief constable.

> *"It is now all about money and costs. The old chief constables were figureheads. This chief constable is a businessman with business acumen. There is no room for passengers anymore. You have to admire him for that. Other forces have shed staff but we still have jobs.*
>
> Police staff senior operational manager. HQ policy unit.

It is possibly relevant that this respondent is in a HQ policy unit where they may have more contact with the chief constable. Also, this extract suggests that the current financial changes facing police forces may drive changes about the way rank is viewed. While therefore there are

suggestions that this formality and focus on rank is relaxing, it remains a strong paradigm, particularly for police officers.

Looking at the profile overall and the results in Table 40, the SDP dimensions in this study split into three groups. First, *planning* and *incremental,* which relate to the direct ways that managers can influence the direction of their organisation. Second, *political* and *enforced, choice* which relate to the constraints on managerial influence. Third, *command* and *culture,* which do not align with either of the first two groups. The ratio,

Profile-ratio = (*planning + incremental*)/(*political + enforced choice*)

gives a single broad measure of the relative influence of managers in the organisation compared to factors outside managerial control. The mean of this ratio for operational managers is .875, showing a perception that internal and external factors are a stronger influence on strategy development in police forces than managerial action. This measure is used later in this chapter to gain an overall view of how SDP influences other variables.

The relatively high influence of the *enforced choice* dimension is recognised by operational managers.

> *"It is the influence of central government. Changes in legislation affect everything. Statute plays a big part in our work. The force has to be in contact and work with other agencies and government departments like immigration, so we can be affected by a wide range of legislation."*
> Police staff, operational manager. HQ policy unit.

It is probably relevant that this view is from a manager in a policy unit performing more specialist work. Working with other government departments is generally not a strong consideration for managers at this level as suggested by the levels of external stakeholder salience in section 5.5. However, the external environment through the influence of legislation, and the associated accountability to the courts, is a constant concern of managers in the police service. Another manager however, suggests that the influence of the environment is more general.

> *"There was a radical shift between the two most recent chiefs but that was probably more due to external factors than coming from any vision or strategic direction from leadership. The changes come from the operational environment and climate."*
> Police officer, operational manager. HQ command unit.

In highlighting the influence of the environment, this manager also alludes to the perceived lack of influence of the *command* dimension already discussed. Figure 24 shows the view of the importance of *command* as average because it is close to the mean of the six dimensions. This questions the importance of the idea of *command* in police forces. Many of the more senior roles in police forces have the title 'commander' reflecting the hierarchical and disciplined nature of police forces. These data may suggest *command* from the chief constable is not apparent, a point also suggested by operational managers in interviews commenting on how a chief constable influences the direction of the force.

> *"There were not a lot of messages from the top team about this. There is a disconnect. There are not strong strategic messages* [from the chief officers*]. The influence comes from the superintendent level – which is possibly how it should be."*
> Police officer, operational manager. HQ command unit.

> *"New ACPO officers want to make a mark by changing things. Sometimes it is logical. It depends on the calibre of the person making the decision. Some* [ideas] *are well thought out. Others are not."*
> Police officer, operational manager. Geographical command unit.

The ambivalent view of *command* has implications for the application of Bailey et al. (2000) model to help explain strategy development in police forces. The findings about this construct are drawn together and conclusions about the importance of *command* in the strategic management of police forces are discussed in chapter 6.

The relative weakness of the *planning* dimension challenges the formal idea of strategic planning being the primary strategic process in police forces. Formal strategic planning processes have been standard in English and Welsh police forces for 20 years, as described in chapter 4. Every year, strategic plans are published, but attitudes within forces about how these plans are developed and implemented are mixed. For example, the tension between rational planning and the influence of organisation culture is apparent in the views of operational managers.

> *"There is still a tendency to look at how we have always done things. It is frustrating because there is a resistance to evidence-based working. There is a lack of analysis but there can also be a disconnect between the analysis and the implementation. It is also rare to do a proper evaluation. We do not do much base-lining. You even*

find this with executive officers. It is not part of their background. They do not see the benefits."

Police staff, operational manager. Geographical command unit.

"In my answers I tried to paint a picture that I feel that I do not get a strong sense of detailed strategic plans. We react to the world around us. It is part of strategy to react to the external environment."

Police officer, operational manager. HQ command unit.

"We tend to copy what we did before rather than work it out. I think that work is delegated down to people who do not have adequate training. There is more 'tick the box' than plan it. No, I think it is something about the transient nature of managers in the unit. Some see it as a staging post to get promotion. They never get the skills."

Police staff, operational manager. HQ command unit.

These comments suggest that strategic decisions are sometimes not seen to be based in rational analysis, but made for political, cultural or other reasons. The perception of the relative lack of *planning* can also be explained by comments about the other dimensions. For example, the negative correlation between *planning* and other dimensions (Table 46) suggest that the strength of *cultural*, *political*, or *command* dimensions can discourage managers from *planning*.

The data from the survey suggest that the *cultural* dimension is not perceived as a strong influence on strategy development in police forces by operational managers. These ideas however are challenged by views that suggest a much more influential role for culture.

"We have a culture of doing things in the way we have always done them. We drift along and kid ourselves that we are changing."

Police officer, operational manager. HQ command unit.

"People here go for tried and tested ways without considering the alternatives. Things like the category of certain jobs – the way that things are done by certain people. They don't question this."

Police officer, operational manager level. Geographical command unit.

"It is not everyone but there is still a canteen culture. But some find it hard to understand. There is resistance to ideas even from some middle managers who

have not had the extra knowledge and understanding. But it is mostly front-line [officers]. *There is a difference in the attitude of staff who do not specialise."*
Police officer, operational manager level. Geographical command unit.

These views suggest that culture remains a more significant influence on management thinking, and therefore management decisions, than the results of the survey suggest. However, it is possible that the influence of strong *culture* may be reducing in some police forces as they are challenged for higher performance with fewer resources.

"The organisational culture takes time to change. Police culture can be difficult to change. It is different to management culture. Culture can help develop and implement strategy. There are pockets of resistance but the police is becoming a more professional service with better cops and better leaders. We are more focused on management and leadership and service delivery. 20 years ago you would not have had a senior police officer talking about those things."
Police officer, operational manager level. Geographical command unit.

The level of the *political* dimension is seen is above the average of the six dimensions, particularly for police officer operational managers, a view reinforced by a police inspector. This view may also support Meyer's (2006) findings about the tension between managers in operational and policy units.

"There are groups internal within the police – certain departments and senior managers who have undue influence, which is not always best. Some have more power than I feel is right. They peddle their agenda rather than a strategic overview of the force. It is individual managers more than anything else. Places like corporate development have a big influence, but they do not always consult the right people."
Police officer, operational manager. HQ command unit.

Police staff operational managers report a higher perception of *incremental* working than police officers. This may be a result of police staff roles being more involved in support functions and therefore less influenced by the short term priorities of central government or the PCC. However, the way that a perception of *enforced choice* can challenge incremental ways of working is highlighted by a police staff manager.

"Our strategy is set very much by central government so we do not have the ability to adjust it. It cannot be constantly updated. Really it just changes when things go wrong."

Police staff, operational manager. HQ command unit.

5.6.2 Senior operational managers' perception of strategy development profile

The strategy development profile for senior operational managers is similar to that of the operational managers, particularly in relation to the *imposed* dimension being strong. Direct comparisons between the two groups of managers however are problematic due to the difference in the SDP dimensions for senior operational managers. The results are shown in Figure 25 which shows the strategy development profile for senior operational managers split between police officers and police staff. The figure shows standardised results of deviations from the mean of the five dimensions. The mean is shown as 0 on the chart and the axis is units of one standard deviation.

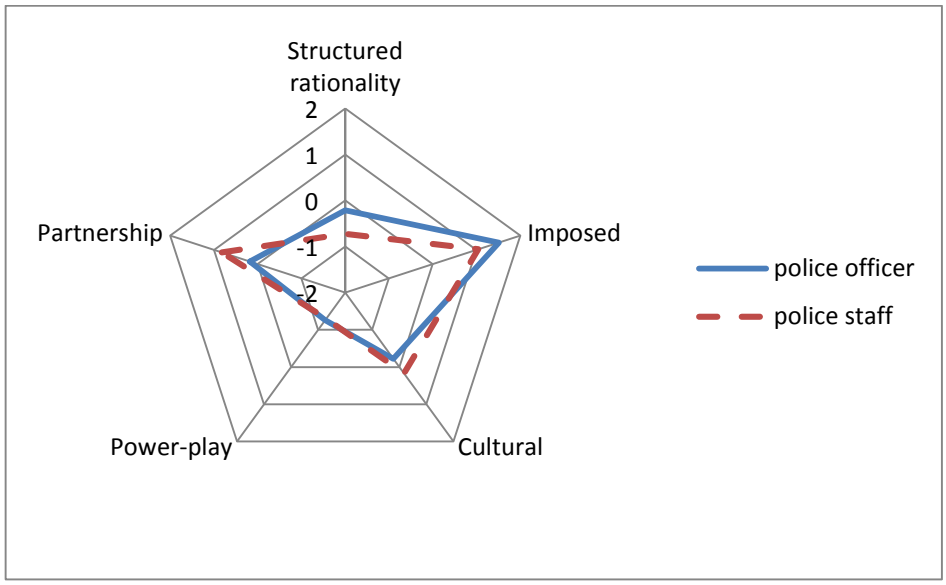


Figure 25 – Strategic development profile by office – senior operational managers.

Although direct comparison is not possible, the SDP of senior operational managers broadly supports the Bailey et al. (1995) theoretical assertions relating to public sector organisations. This is seen in the strong *imposed* dimension and relatively weak influence of *structured rationality*. The stronger *partnership* dimension, which comprises aspects of collaboration and incremental working, is a development of the original Bailey et al. (1995) model. The inclusion

of this as a separate dimension may be a result of the increased collaborative working required of management in the police service in the past 20 years.

	Mean	S.D.	Structured rationality	Imposed	Cultural	Power-play	Partnership
Structured rationality	3.289	.765	1				
Imposed	3.726	.717	.084	1			
Cultural	3.391	.694	-.091	**.162***	1		
Power-play	3.088	.725	**-.319****	**.309****	**.332***	1	
Partnership	3.518	.650	**.138****	**.126***	**.253***	.015	1

** correlation significant at the .01 level (two-tailed)

* correlation significant at the .05 level (two-tailed)

Table 43 – Bi-variate correlations for strategy development profile variables. Senior operational managers

The five dimensions of SDP for senior operational managers are not independent. This is shown in Table 43. *Structured rationality* does not strongly correlate positively with the other four dimensions and correlates negatively with *power-play*. This supports the validity of the new *power-play* dimension as an indicator of the inappropriate use of power. The more actors within the force are perceived to be using power for their own ends and not the goals of the force, the less any decisions will be seen as rational.

Power-play has a moderately strong (Cohen, 1988) correlation with the *imposed* and *cultural* dimensions. This supports the Bailey and Johnson (1995) assertion that these three dimensions are linked. The *imposed* and *power-play* dimensions essentially deal with constraints on managers. Therefore these data suggest that, as an influence on strategy development, organisational culture can be a constraint to rational, and particularly divergent, thinking. This is summed up graphically by a police chief inspector which suggests nervousness about new ideas.

> *"The force is like a bucket of crabs. You do not want to crawl up the side and be noticed. A new senior officer arrived and at first they were a breath of fresh air, but they were overcome by the culture."*
>
> Police officer, senior operational manager. HQ policy unit.

Similar to the results for operational managers Table 47 shows that, for this study of senior operational managers, the dimensions in this can be study split into three groups. First, *structured rationality* and *partnership,* which relate to the direct ways that managers can

influence the direction of their organisation. Second, *power-play* and *imposed,* which relate to the constraints on managerial influence. Third, *cultural,* which aligns with both groups. A measure of profile ratio similar to that used for operational managers can be calculated for senior operational managers.

Profile-ratio = (*structured rationality + partnership*)/(*power-play + imposed*)

This again gives a single broad measure of the relative influence of managers in the organisation in comparison with internal and external constraints. The mean of this ratio for senior operational managers is 1.033, showing a perception that internal and external factors have a similar level of influence on strategy development as managerial action. This measure is used in the analysis to gain an overall view of how SDP influences other variables.

The relative weak perception of rational ways of working, shown in the *planning* dimension of operational managers, is reflected here in the *structured rationality* dimension. Police officer managers see more *structured rationality* than their police staff colleagues but the difference is not significant (t (248) = 1.336 p =.173, two tailed).

The views of senior operational managers about the rationality of strategy development in police forces are split. There are those who see little evidence of rational working by the actors involved and those who question the value of the formal processes used in the force. Overall this supports the results of the survey about the perception of the low level of *structured rationality*, and the discussion in the previous section about the link between formal processes and divergent activity.

> *"I realised that 50% of what people were talking about was based on good research and numbers. 50% was being made up as they went along. It could be this or it could be that. It depends on your senior management."*
> Police staff, senior operational manager level. HQ policy unit.

> *"Some* [strategies] *are planned. There is a structure of meetings so some of the decisions follow these and are planned. But it is difficult not to be reactive as well. Some decisions have to be made on the spot by managers. So there is a balance."*
> Police officer, senior operational manager. HQ policy unit.

> *"The executive support themselves with bright sparks who they think are representative – but they are a small minority."*

Police officer, senior operational manager. HQ policy unit.

"When it comes to how many people look at the development plan – it does not drive daily work. I see it as the earth surrounded by the atmosphere which protects it and keeps the oxygen in. People do not usually look up and think about the atmosphere. It is the same with policies. You do not see them unless you stand back a long way, and how many [middle managers] *get the chance to do that from day to day?"*

Police staff, senior operational manager. HQ policy unit.

Similarly to the *enforced choice* dimension of operational managers, the *imposed* dimension is perceived as the strongest influence on strategy development, particularly for police officers at this level, though the difference between police officer and police staff managers is not significant. (t (248) = 1.716 p=.087, two-tailed).

"In terms of the way we develop strategy the political influence is quite clear. Central government and the PCC say what it is they want you to focus on. Sometimes it happens that we get knocked off track. You cannot see things coming over the horizon. So we are good at setting the strategy but you can get knocked off. "

Police officer, senior operational manager. Geographic command unit.

A police officer senior operational manager saw external factors influencing more broadly than through the formal legislation and regulation from government.

"Central government sets the strategic policing requirement. All PCCs have cognisance of this. [...] Technically the chief constable has the freedom to ignore something but the HMIC speaks to the Home Secretary who speaks to the PCC who has a word with the chief constable."

Police office, senior operational manager. HQ command unit.

The *power-play* dimension is the weakest for both police officers and police staff. This contrasts with the importance given to the subject in some interviews. For example, *power-play* can be the darker side of *command* as seen in the negative aspects of the following managers' views.

"The hierarchy is very strong. People fear the chief constable. They fear what the consequences of something might be."

Police officer, senior operational manager. HQ policy unit.

More often, concern is expressed about the power of other people in the force who are able to influence the chief constable.

> *"The position of middle managers is slightly difficult. There is a problem of the tyranny of the expert. They shape the way in which things are delivered. E.g. road death investigation- which took ages! There were all sorts of explanations put forward. Power of experts has risen in the past 20 years."*
> Police officer, senior manager. HQ policy unit.

> *"Decisions are made by who you know. People play golf together – or something like this – and the consult each other. It is natural to surround yourself with people who you are comfortable with and listen to them more."*
> Police officer, senior operational manager. HQ command unit.

> *"A big difference between* [force A and force B] *was the web of interpersonal relationships in* [force A]. *Being a smaller force, people had worked with each other but there were also partners, ex-partners, family to consider. I used to think of it like a* [force A] *dining club. There were close friendships and things were discussed and agreed outside the formal structures."*
> Police officer, senior operational manager. HQ policy unit.

A police superintendent accepts that people and groups within the force have this power but suggest that it is not used destructively. This view may ignore the way that power can be used more subtly, not leading to overt conflict.

> *"I have never known a group block implementation of something – ever. I know that we work closely with groups and there can always be resistance but I have never seen a group try to block something. To be honest the things we are trying to do are for the public good. They are not things which people would want to block."*
> Police staff, senior operational manager. HQ policy unit.

The *partnership* dimension is the second strongest dimension in the profile and is emphasised particularly by police staff managers.

"[Decisions are made by] *collaboration. Directorates are involved though the number has shrunk recently. There is a formal structure of meetings. We have quite good constructive meetings. Meetings have to be effective today.*
Police officer, senior operational manager. Geographic command unit.

The data from interviews suggest that culture has a larger influence than the results of the survey suggest. This is similar to the results for operational managers. It is possible that the impact of culture is being underestimated in the survey results as respondents do not consider how their paradigm influences their decisions. The following comments by police chief inspectors suggest strong cultures with significant influence.

"I have been in the force since I was 15, as a cadet. I am on my eighth chief constable. The culture has never eroded in all that time. It is very fixed. Small minded. The force is very conscious of its scale. It makes it determined but we do not take new initiatives lightly. We look to others to do things first. We are cautious. There is a core of activities which we do not stray too far from."
Police officer, senior operational manager. HQ policy unit.

"There has been a lot of strategic change … but now there is some retrenchment – and it is like there is a relief around the force that we are back in our comfort zone – crime reduction – harm reduction. The current regime legitimised it. There is relief in the force that we are not getting more into the softer stuff."
Police officer, operational manager. HQ policy unit.

"There are strong corporate messages. We are a force that locks people up. An ACC now retired had a [public] *poster made 'You lock up – We'll lock them up'. He would talk about the necessity tests [13]for arrests in derogatory terms."*
Police officer, senior operational manager. HQ policy unit.

While the difference is small, police staff see more evidence of culture influencing decisions than police officers. This may suggest the perception of a dominant professional culture within front-

[13] This refers to the principle that a suspect should be arrested only if it is necessary to ensure that the offence is dealt with.

line workers which is not fully shared by colleagues performing more support roles. The following response gives an example of this.

> *"I was thinking more of the police officers than the police staff. The police officers have a job for life. But I come at things from the perspective of the other jobs I have done. There is often a kickback from operational officers."*
>
> Police staff, operational manager. Geographical command unit.

5.6.3 Implications for research questions of strategy development profile

This section once again highlights how the views of managers are associated with *rank*, a factor already noted in this chapter. This is relevant to research question 2 which relates to how strategy development profile impacts on middle manager divergent activity. The relative lack of influence of rational *planning* is emphasised by both middle manager groups and the role and influence of *command* is unclear. The strong influence of factors external to the force, highlighted by strong *enforced choice* and *imposed* dimensions, accords with the findings about the level of stakeholder salience discussed in section 5.5.

Having examined the data relating to the three constructs at the heart of this study, the next section will test the conceptual research model (Figure 11 in chapter 2) and consider the extent to which the hypotheses guiding this study are supported.

5.7 Research model assessment

Sections 5.5 to 5.6 set out the data in relation to the three constructs which are the basis of the research model guiding this study. This section now considers the links between these constructs. The research model details the proposed links between the latent variables which are discussed in chapter 2. Assessment of the model examines the statistical and practical significance of these links. The assessment follows the structure suggested by Hair et al. (2014). First, section 5.7.1 tests the measurement model examining the validity and reliability of the reflective and formative latent variables in the model. Section 5.7.2 then assesses the structural model and determines whether the hypotheses put forward in chapter 2 are supported by the data. To simplify the model, these analyses use a composite measure of organisation performance combining the three objective indicators described in chapter 3.

Four hypotheses are set out in section 2.8 and section 5.7.4 considers these in turn. Table 44 summarises the findings in respect of these hypotheses.

Hypotheses	Operational managers	Senior operational managers
1. The higher the level of middle manager divergent activity, the higher the level of organisation performance.	Not supported	Not supported
2. The higher the levels of influence, the higher the level of middle manager divergent activity.	Supported	Supported
3. The higher the level of external stakeholder salience, the lower the level of influence.	Not supported	Not supported
4. The strategy development profile of an organisation will impact on influence.	Supported	Supported

Table 44 - Summary of findings

The use of PLS-SEM as the statistical tool to test the research model is discussed in section 3.5.1. The benefit of this approach is the ability to deal with both formative and reflective latent variables as part of a complex research model. Hair et al. (2014) suggest that an effective analysis requires minimum sample size of ten times the highest number of indicators for any latent variable. In these analyses the highest number of indicators for any variable is eight showing that a minimum sample size of 80 observations is necessary. These analyses include respectively 408 and 249 observations, and so clearly exceed this minimum figure.

5.7.2 Reliability and validity of constructs

An initial review of all of the indicators associated with the reflective latent variables reveals a number where the loading is lower than .708 recommended by Hair et al. (2014). Hair et al. suggest that indicators with outer loadings below .3 should always be removed. They further suggest that those with outer loadings between .4 and .7 should be considered for removal if this results in improvement to composite reliability and content validity. This results in five items removed from *strategy development profile* variables for operational managers and eight items removed for senior operational managers.

Appendix J details the items removed and the implications for the analysis. The removal of these items risks having an impact on the construct validity of the SDP variables. This particularly raises further questions concerning the *command* variable and its relevance to the context of a police force. Care needs to be taken in interpreting the findings involving these variables and this is discussed in chapter 6.

The research model includes reflective latent variables to measure the level of SDP dimensions and *middle manager divergent activity*. Internal reliability of latent variables is commonly tested using Cronbach's α. The results of this for the variables in the study are in chapter 5. PLS-SEM uses a different test of reliability which is less sensitive to sample size and does not assume that all indicators are equally reliable (Hair et. al., 2014). This is composite reliability (ρ_c) and the results for the reflective variables in the model are in Table 45.

	Operational managers		**Senior operational managers**	
Latent variable	**Composite reliability (ρc)**	**Convergent validity (AVE)**	**Composite reliability (ρc)**	**Convergent validity (AVE)**
Championing alternatives	.9074	.7104	.8994	.6913
Facilitating adaptability	.8604	.5589	.8813	.6011
Command	.7482	.5171	NA	NA
Planning	.9137	.5701	NA	NA
Enforced choice	.7762	.4688	NA	NA
Cultural	.7912	.4955	NA	NA
Incremental	.7969	.4997	NA	NA
Political	.8578	.5513	NA	NA
Structured rationality	NA	NA	.9058	.5472
Partnership	NA	NA	.7932	.5657
Power-play	NA	NA	.8557	.5428
Culture	NA	NA	.8062	.5818
Imposed	NA	NA	.8200	.4788

Table 45 – Composite reliability and convergent validity of latent constructs.

PLS-SEM assesses validity through considering the outer loadings of the indicators as revealed through the average variance extracted (AVE). This is based on the square of the outer loading being a measure of the variance extracted by that indicator. Hair et al. recommend that the average of these squared loadings should be higher than .5, thus showing that variance extracted by the indicators is larger than the error remaining. The results of AVE are also shown in Table 45.

All of the latent variables exceed the guideline for composite reliability of .7 recommended by Hair et al. (2014). The variables *championing alternatives*, *planning* and *structured rationality* exceed .9 which may suggest that there is some redundancy in these measures. However, an examination of the bi-variate correlation between the items in these variables shows that no

inter-item correlation exceeds .682. This suggests that collinearity between items in these variables is not excessive and for the purposes of this analysis, they are not amended. See Table 46.

	Inter-item correlations	
	Operational managers	**Senior operational managers**
Championing alternatives	.564 - .648	.480 - .682
Planning	.458 - .621	NA
Structured rationality	NA	.369 - .608

Table 46 – Range of inter-item correlation for latent variables with composite reliability >.9

Table 51 shows that the AVE of all the variables exceed or are close to the level recommended by Hair et al. (2014). The four variables which fall below this threshold have not been further adjusted because the difference is small and the variables have a firm theoretical basis. These data show that the reflective latent variables all have acceptable levels of component reliability and convergent validity.

Discriminant validity is assessed to determine the extent to which latent variables are distinct from the other variables in the way they are measured. This therefore measures whether a construct captures information not covered by the other constructs. This is assessed in two ways. First, through examining whether indicators cross-load strongly onto other variables. Second, using the Fornell-Larcker criterion (Hair et al., 2014) which suggests that the square root of the AVE of a latent variable should be larger than the bi-variate correlation between that variable and other variables in the model.

A review of the cross loading for all reflective indicators shows that they are all significantly lower than their loading on the corresponding latent variable. The results of the Fornell-Larcker test are set out in Appendix K. These data show that the square root of the AVE is larger than the bi-variate correlation of the relevant variables. These data show that overall, the reflective variables exhibit satisfactory composite reliability, convergent validity and discriminant validity.

The research model includes two formative latent variables. These are *composite performance* and *external stakeholder salience*. Formative indicators collectively form the variable rather than being reflected by the variable and do therefore not necessarily covary. Measures of validity and reliability used in relation to reflective variables are therefore not appropriate. It is

necessary to consider instead the extent to which the indicators comprehensively cover all aspects of the variable.

The comprehensiveness of the indicators forming *organisation performance* and *external stakeholder salience* is discussed in chapter 3. Validity of formative variables is assessed through examining the indicators for problems of excessive collinearity, evaluating their correlation with a reflective indicator of the same variable where available, and assessing the relevance of individual indicators through bootstrapping. Collinearity of the indicators is revealed through regressing them against a latent variable. Results for the formative indicators are contained in Table 47. This shows that variance inflation factor (VIF) for all indicators is clearly lower than 5 as recommended by Hair et al. (2014) and that there is no problem of collinearity with the indicators used.

Indicator	VIF		Indicator	VIF
Improvement in crime recorded	2.63		Salience of government	1.14
Staff satisfaction	1.76		Salience of CRPs	1.03
Victim satisfaction	1.70		Salience of PCCs	1.16

Table 47 – Collinearity assessment of formative variables

As well as the formative measure of *composite performance* included in the study, a reflective measure of organisation performance is used. The convergent validity of the formative performance indicators can be assessed through the extent to which the latent variable formed by them correlates with this reflective variable. In this case the formative measure of composite performance has a low correlation (.307) with the reflective variable. This does not meet the threshold of .8 suggested by Hair et al. (2014) suggesting that this variable has weak convergent validity. More detailed analysis shows that this low correlation is caused by the staff satisfaction item which has a very low and negative correlation with the reflective variable. However, this item has significant outer weight, as shown below, and is retained in the variable to maintain the comprehensiveness of the measure.

The significance of the indicators is assessed through bootstrapping. The results of the bootstrapping procedure using 5000 samples are shown in Table 48.

Formative Indicators	Outer Weights (Outer Load.)	t value	p value
Imp. in crime recorded	-.258 (.1907)	.565	.572
Staff satisfaction	1.119 (-.2034)	2.853**	.005
Victim satisfaction	-.209 (.9558)	.515	.607
Salience of government	.015 (.714)	.117	.907
Salience of CRPs	.860 (.646)	5.595**	.000
Salience of PCCs	.503 (.706)	2.300*	.022

** correlation significant at the .01 level (two-tailed)

* correlation significant at the .05 level (two-tailed)

Table 48 – Results of bootstrapping procedure for formative indicators

Three of the formative indicators are not significant. However, although the salience of government has an outer weight of .015, it has an outer loading of .714 showing that it makes a considerable contribution to the latent variable *external stakeholder salience*. Additionally in the preparation of the data collection, this scale was discussed with senior managers in the police service who agreed that these stakeholders represented the full range of external stakeholders with significant influence over police force strategy. All three indicators comprising the variable are therefore retained in the analysis.

Similarly, the performance measures *improvement in crime* recorded and *victim satisfaction* show low outer weights but outer loadings which show a contribution to the latent variable composite performance. The theoretical basis of including these measures is set out in chapter 3. Despite the questionable convergent validity of this variable, it is retained in the analysis because it forms a comprehensive view of the complex performance of police forces.

This section establishes that the latent variables included in this study have the reliability and validity to allow relationships between them to be interpreted. The following section considers these relationships and what they reveal about the hypotheses in the study.

5.7.3 Assessing the structural model

This section assesses the structural model results. Full results are shown in Appendix L. Following Hair et al. (2014) the assessment is done in three stages. First, the latent variables are examined for problems of collinearity. The variables display a VIF of between 1.1 and 2.15,

clearly lower than 5 recommended by Hair et al. (2014), and show no issues of collinearity. Second, the significance and relevance of the relationships in the structural model are assessed by considering the study hypotheses in turn.

Table 49 shows the coefficients of determination for the endogenous variables in the model. Initial estimates show that for operational managers the exogenous variables in the model explain 19.2% of the variance of *influence* and 11.4% and 10.0% respectively of the variance of *championing alternatives* and *facilitating adaptability*. However, an insignificant amount (<1%) of the variance of both the perceptual measure of *performance* and the objective *composite performance* measure is explained. For senior operational managers, the model explains more of the variance of *influence* (31%), *championing alternatives* (17.1%) and *facilitating adaptability* (15.3%) than for operational managers. However, for senior operational managers also, the model explains less and 1% of the variance in *performance* and *composite performance*. These results compare in size with results of previous studies but, using the guidelines of Hair et al. (2014), these represent a small amount of the variance of these variables.

	Operational managers		**Senior operational managers**	
Endogenous latent variable	**R^2**	**Q^2**	**R^2**	**Q^2**
Influence	.192	.159	.312	.275
Championing alternatives	.114	.081	.171	.120
Facilitating adaptability	.104	.060	.153	.089
Performance	.005	.117	.007	.102
Composite performance	.007	NA	.005	NA

Table 49 – Coefficient of determination and predictive relevance for reflective endogenous constructs

The predictive relevance of the reflective endogenous latent variables in the path model is assessed using a blindfolding procedure with an omission distance of 7. The results are also shown in Table 49. Using the guidelines suggested by Chin (1998) as cited in Hair et al. (2014), the Q^2 values of greater than 0 show that the variables have predictive relevance.

Hypothesis 1 states that the higher the level of middle manager divergent activity, the higher the level of organisation performance. This is not supported by the data from this study. Results for the significance of path coefficients following a bootstrapping procedure using 5,000 subsamples is shown in Table 50.

Path	Path coefficient	t value	p value	f^2
Operational managers				
Championing alternatives – performance	.0472	.7674	0.443	NA
Facilitating adaptability – performance	.0278	.4855	0.628	NA
Championing alternatives – composite performance	.0922	1.3196	0.188	NA
Facilitating adaptability – composite performance	-.1230*	1.6987	0.090	.008
Senior operational managers				
Championing alternatives – performance	-.0929	1.3355	0.183	NA
Facilitating adaptability – performance	.1146	1.4532	0.147	NA
Championing alternatives – composite performance	-.0265	.3391	0.735	NA
Facilitating adaptability – composite performance	.0844	.9648	0.336	NA

* significant at the .1 level

Table 50 – Path coefficients for impact of divergent activity on organisation performance

The link between *facilitating adaptability* and *composite performance* for operational managers is statistically significant at the $p<.1$ level. However, the effect size ($f^2 = .008$) shows that the relative impact is very small (Cohen, 1988) and not of practical significance.

This suggests that, in police forces, any middle manager impact on *organisation performance* is not through their divergent activity. Ahearne et al. (2014) propose that conflicting findings about the performance impact of middle manager influence has three possible explanations. First, that any effect is not linear. Second, that contingencies are not being taken into account. Third, that the operationalisation of the performance variable is flawed. An examination of the data does not suggest non-linear relationships similar to those found by Ahearne et al. Inclusion of both subjective and objective measures of performance in the study should expose problems in the endogenous variable. There are however ways that the impact of a contingent variable in the police force context may explain the absence of a link between these latent variables.

Wooldridge and Floyd (1990) propose that the influence of middle managers may be through improving the quality of decision made. Both levels of middle manager involved in the study report engaging in divergent activity. It is possible however that the divergent activity recognised by police force middle managers is not influencing decisions made about strategy. The hierarchical and disciplined nature of police forces, discussed in chapter 4, may constrain the divergent activity to only engaging in formal structures and systems. The relatively weak influence of the *planning* or *structured rationality* dimensions may then question the effectiveness of the structures or systems used. Examples of perceived weakness of rational systems are discussed in section 5.6.1 and 5.6.2. They are summed up by police chief inspectors who suggest that a there is a significant cultural limitation on what is seen as evidence and how it is gathered.

"A few months ago I attended an evidence based policing conference where people from [the force] *who had done the* [university] *course presented their findings. There were officers from PC to ACC there. Listening to the conversations at lunch and elsewhere there were a few saying, 'what do they know? They have forgotten what the real world is like. Only people at the front line know what it is really like'."*
Police officer, senior operational manager. Geographical command unit.

"But there is not a shared view in the force. There is a divide in perceptions between operational staff and the executive. The executive get told the answers they want."
Police officer, senior operational manager. HQ policy unit.

Mantere (2008) proposes that engagement of managers in divergent activity requires reciprocal action from top management. *Championing alternatives* requires top management to actively include middle managers and act as a referee between competing ideas. *Facilitating adaptability* requires a culture of trust. For divergent activity to influence strategy development and improve performance, extra factors need to be present. Andersen (2000) suggests that, to be effective, the autonomous activity of middle managers needs to take place within an effective rational structure. Data arising from divergent activity needs to be examined objectively. It is possible that perceived or actual weakness of the rational planning structures in police forces means that they do not encourage middle managers to engage effectively.

Hypothesis 2 states that the higher the level of *influence*, the higher the level *of middle manager divergent activity*. The data in this study support this link for both levels of middle manager and both types of divergent activity. See results in Table 51.

Path	Path coefficient	t value	p value	f^2
Operational managers				
Influence – championing alternatives	.2865***	6.085	.000	.064
Influence – facilitating adaptability	.1955***	3.781	.000	.020
Senior operational managers				
Influence – championing alternatives	.4567***	7.761	.000	.099
Influence – facilitating adaptability	.4358***	6.678	.000	.072

*** significant at the .01 level

Table 51 – Path coefficients of the impact of influence on divergent activity

These findings add detail to the link between organisational factors and *middle manager divergent activity*. For example Mantere (2008) concludes that top management need to actively involve middle managers. They need to invite them to engage. However, even if invited

to take part, there is a potential problem for middle managers. Floyd and Lane (2000) propose that divergent activity is a source of strategic role conflict. Middle managers' primary role is about managing the effectiveness of the part of the organisation for which they are responsible. They need to ensure that their resources, including their own time and energy, are focused on the success of the organisational strategy. Engaging in divergent activity, requiring a focus on new ideas and opportunities, causes a conflict with their primary role. Even when invited, middle managers need a reason to get involved in divergent activity.

Divergent activity also brings the possibility of failure which managers in this study suggest is problematic for police forces. This is summed up in a comment to the researcher by a chief constable during the study.

> *"I give my commanders the freedom to get it right. They do not have the freedom to get it wrong."*
> Chief constable.

A similar view reinforced this from the point of view of a chief superintendent.

> *"The hierarchy is very strong. People fear the chief constable. They fear what the consequence of something might be."*
> Police officer, senior operational manager. HQ policy unit.

Another police staff senior manager saw dealing with failure as associated with a problem of a blame culture.

> "[The chief constable] *puts this down to the blame culture. He says that the problem is that police forces treat their staff like suspects. If there is a mistake or complaint the focus is on seeing if there is evidence for someone to be disciplined rather than looking at what we can learn from it."*
> Police staff, senior manager. HQ policy unit.

Faced with the tension of strategic role conflict and the risk of failure, middle managers will see reasons not to engage in divergent activity. Belief that their time, energy, effort, and the risk they are taking actually results in some *influence* is important to encourage their engagement.

Hypothesis 3 states that the higher the level of *external stakeholder salience* the lover the level of *influence*. The data does indicate that *external stakeholder salience* impacts on middle

managers' perception of *influence* but the impact is the opposite of that set out in this hypothesis. Rather than have a negative impact on *influence*, both middle manager groups reveal a small but significant positive association between *external stakeholder salience* and *influence*. See results in Table 52.

Path	Path coefficient	t value	p value	f^2
Operational managers				
Ext. stakeholder salience – influence	.1803***	4.166	.000	.035
Senior operational managers				
Ext. stakeholder salience – influence	.1189**	2.166	.031	.017

*** significant at the .01 level
** significant at the .05 level

Table 52 –path coefficients of the impact of external stakeholder salience on influence

This appears to challenge the idea of Rizzo (1970) that the extra demands of stakeholders may lead to role ambiguity and conflict. It may therefore support the findings of Kuratko et al. (2007) that engagement with a variety of stakeholders can result in an increase in middle manager entrepreneurial activity fuelled by a broader range of differing views. If this explanation applied in this case, it may be expected that the higher external stakeholder salience would have a direct impact on increasing middle manager divergent activity. This is not found. See results in Table 53. Although there are very small signs of that *influence* mediates the link between *external stakeholder salience* and *middle manager divergent activity*, these are not significant. This reinforces the finding that *external stakeholder salience* is not associated with middle manager divergent activity, but only with *influence*.

	Direct link with *influence* removed		**Direct link mediated by *influence***	
Path	**Path coeff.**	**t value**	**Path coeff.**	**t value**
Operational managers				
External stakeholder salience – championing alternatives	.1091*	2.221	.0672	1.472
External stakeholder salience – facilitating adaptability	.0650	1.405	.0383	.9593
Senior operational managers				
External stakeholder salience – championing alternatives	.0095	.1833	-.0548	1.066
External stakeholder salience – facilitating adaptability	.0187	.3313	-.0382	.7768

* Link significant a p<.05 level

Table 53 – testing mediating effect of influence on external stakeholder salience

A closer analysis of the individual stakeholders shows how the higher *external stakeholder salience* may actually avoid increasing role conflict and instead be associated with a higher level of *influence*. Crime reduction partnerships (CRP) have a significantly larger outer weighting on *external stakeholder salience* than the other two stakeholders (see Table 48). CRP are local networks of agencies which have a statutory duty to work together to deal with local priorities. The nature of these groups may explain why their salience may actually decrease role ambiguity for middle managers and explain the positive link with *influence*.

Crime reduction partnerships are groups of agencies who meet as equals. None has power over others. Decisions are made by negotiation and collaboration. Where a CRP works well, a local police commander can benefit in two ways. First, they are able to coordinate police activity with other agencies in a way which helps longer term outcomes. Second, effective CRPs can argue they have a greater mandate to deal with local problems rather than force-wide or national priorities. Police force middle managers are more likely to engage directly with CRPs than other external stakeholders included in the study. The government and the PCC can be viewed merely as sources of regulation and priorities, whose influence comes through the chief constable. Hypothesis 3, that higher levels of *external stakeholder salience* will be associated with lower levels of influence, is not supported.

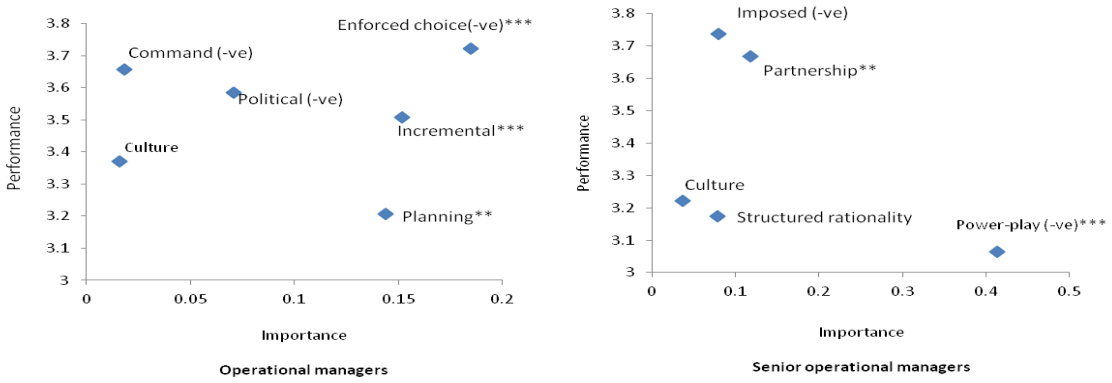
Hypothesis 4 states that the *strategy development profile* will impact on *influence*. The data from the study supports this for both levels of middle manager. Table 54 shows that *profile-ratio* has a medium to large effect on *influence* especially for senior operational managers. The more that the strategy of the force is seen to be controlled by rational decision making of management, as against external forces, political manoeuvring and culture, the higher individual perception of influence of middle managers.

Path	Path coefficient	t value	p value	f^2
Operational managers				
Enforced choice – influence	-.1850***	3.593	.000	.008
Incremental - influence	.1519***	2.936	.004	.018
Planning – influence	.1442**	2.539	.011	.016
Profile ratio - influence	.2907***	5.875	.000	.095
Senior operational managers				
Power-play – influence	-.4133***	5.873	.000	.1450
Partnership – influence	.1188**	2.245	.026	.017
Profile ratio - influence	.3981***	6.874	.000	.1844

*** significant at the .01 level
** significant at the .05 level

Table 54 – Path coefficients of the impact of SDP variables on influence

Figures 26 and 27 show the impact of the SDP dimensions in more detail. In these charts, the importance axis is the path coefficient of the link between the SDP latent variable and *influence*. The performance axis is the standardised strength of the dimension. The latent variables with suffix (-ve) show that an increase in the level of that variable is associated with a decrease in the level of *influence*.



*** significant at the .01 level
** significant at the .05 level

Figures 26 and 27 – Importance-performance matrix for impact of SDP variables in influence.

The level of *power-play* can be seen to have the most impact on *influence* for senior operational managers but it is relatively weak. A change in the perception of *power-play* would have the strongest effect on middle managers' feelings of *influence*. The matrix also shows that for senior operational managers, the perception of *influence* is positively linked to the perception of *partnership* working. However, a change in *partnership* has significantly less impact than *power-play*. This fits with the perceptions of CRP discussed in section 5.5, and the way they are viewed as important, but ineffective because they have little power.

For operational managers, the data show that *enforced choice*, *incremental* and *planning* potentially have the most impact on *influence* but that planning is *relatively* weak. This supports the findings of Collier et al. (2004) that managers' involvement in strategy processes will be linked to the perception of processes seen as rational, focused and adaptive. However this link is not apparent for senior operational managers where the link between *structured rationality* and *influence* is weaker.

This link between *planning* and *influence* adds to understanding about how formal strategic planning processes impact on organisations. It supports the findings of Kaplan and Beinhocker (2003) which propose that the value of formal planning is not through the preparation of plans but in the way it prepares managers. Within police forces, for operational managers, there is a

small but significant association between *planning* and *influence*. Formal planning processes encourage managers to be involved because this increases their perception of their personal influence.

In order to understand better the importance of the association between SDP and *influence*, the link between SDP and *divergent activity* is explored. The data suggest that the level of some SDP dimensions have a limited link to the level of *middle manager divergent activity*. Results are in Table 55. Although these links are statistically significant the effect sizes can be classed as between small and very small and overall of little practical importance.

Path	Path coefficient	t value	p value	f^2
Operational managers				
Enforced choice – facilitating adaptability	-.0950*	1.725	0.085	.008
Incremental – facilitating adaptability	.1095**	2.002	0.045	.010
Political – facilitating adaptability	.1318**	2.348	0.019	.012
Senior operational managers				
Power-play – facilitating adaptability	.1755**	1.978	0.049	.018
Profile-ratio – championing alternatives	-.0985*	1.687	0.093	.008
Profile-ratio – facilitating adaptability	-.1243*	1.751	0.081	.014

** significant at the .05 level
* significant at the .1 level

Table 55 – Path coefficients of the impact of SDP variables and profile ratio on divergent activity

A clear picture of the nature of any link between strategy development processes and middle manager strategic activity is not revealed. Bowd (2003) looks for this connection using a model of strategy development defined by Hart and Banbury (1994). He concludes that is it "complex and inter-related" (p 208) and suggests that a more detailed model is required. The strategy development model of Bailey et al. (2000) used in this study supplies the greater level of detail. The fact that the link between strategy development and middle manager activity is still not strongly found suggests that contextual variables may be influencing this link. One possibility, about how perceptions of personal influence may affect the link, is discussed later in this section.

Although the effect size is small, for both middle manager groups issues of *politics* and *power-play* have the most impact. Higher levels of *politics* or *power-play* are linked to higher levels of *facilitating adaptability*. This questions the findings of Raman (2009) and Currie and Proctor (2005) who conclude that dealing with internal political tensions constrains the strategic activity of middle managers. Additionally, the views of managers discussed in section 5.2 highlight the negative aspects of internal politics or suggest it does not have significant influence. The causes

of this are unclear and the connection between internal politics and divergent activity needs more examination. It is possible that the link is not linear and while a small increase in political working constrains middle manager divergent activity, higher levels mean that official organisational structures have broken down, giving managers greater freedom.

Table 55 also shows no evidence that the level of rational planning activity links to the level of middle manager divergent activity. This possibly suggests that despite 20 years of use, rational planning processes are not a strong influence on the organisational context. Overall, the data reveal a connection which is not yet fully researched.

Table 56 shows that *influence* partially mediates the link between SDP and middle manager divergent activity for some SDP latent variables. Hair et al. *(2014)* suggest that a level of variance accounted for (VAF) between .2 and .8 shows partial mediation. In particular, the mediation of the link between *power-play* and divergent activity displays a suppressor effect (Hair et al., 2014) where the inclusion of the mediating variable *influence* causes the direct link to change from negative to positive. This suggests that *power-play* impacts on the divergent activity variables in two ways. First, the perception of *power-play* decreases divergent activity because it decreases the middle managers' view of their own ability to make a difference. Second, the perception of *power-play* increases divergent activity because middle managers see opportunities in the resulting weakness of the formal structures. The data show that for senior operational managers, the negative impact of *power-play* on divergent activity flows from how it affects *influence*.

	Direct link with influence variable removed			**Direct link mediated by influence**			
Path	**Path coeff.**	**t value**	**p value**	**Path coeff.**	**t value**	**p value**	**VAF**
Operational managers							
Enforced choice – facilitating adaptability	-.1147***	2.706	0.0071	-.0950*	1.724	0.0855	.28
Incremental – facilitating adaptability	.1520***	2.996	0.0029	.1095**	2.026	0.0434	.22
Planning – facilitating adaptability	.1039*	1.880	0.0608	.0794	1.4894	0.1372	.24
Profile ratio – facilitating adaptability	.141***	2.693	0.0074	.066	1.478	0.1402	.50
Senior operational managers							
Power-play – championing alternatives	-.2054***	2.979	0.0031	.114	1.143	0.2541	NA
Power-play – facilitating adaptability	-.1718**	2.187	0.0298	.175**	1.978	0.0490	NA

*** significant at the p<.01 level
** significant at the p<.05 level
* significant at the p<.1 level

Table 56 – testing mediating effect of influence

For operational managers the impact of *enforced choice* and *incremental* on *facilitating adaptability* is partly mediated by *influence*. There is no evidence that *influence* mediates the impact of the SDP variables on *championing alternatives*. This may again support the view that in police forces the upward focus associated with championing alternatives is predominantly associated with using formal structures and systems. Hypothesis 4, that the strategy development profile of an organisation will directly impact *influence*, is supported.

5.8 Summary

This chapter sets out details of the managers participating in the study and shows that they represent the full range of police forces, management levels and roles. It also describes how the quantitative and qualitative data collected are brought together and analysed.

The pilot study suggests that middle managers in police forces should be viewed as two separate groups based on difference in rank and this is what the analysis reveals. The two groups differ not just in their level of divergent activity but also in their perception of stakeholder salience and strategy development. This leads the researcher to analyse the two middle manager groups separately.

Police force middle managers report that they engage in divergent activity and the evidence suggests that rank is the most significant antecedent of the level of this activity. However, the type of divergent activity described is constrained by the formal structures and systems of police forces and not the result of autonomous, innovative or experimental behaviour.

Middle managers perceive that the executive management of their force has the most salience of all stakeholder groups, suggesting that they see significant opportunity for the managers of the force to influence its strategy and success. However, the salience of central government and Police and Crime Commissioners is also perceived as high, showing that police managers are significantly affected by external stakeholders.

Strategic decisions of the force are seen as significantly enforced or imposed from outside the organisation. This supports the views of the salience of some external stakeholders. Rational planning is not seen as having a significant influence of strategic decisions and the impact of command on decisions was unclear.

The findings do not support the hypothesis that middle manager divergent activity is associated with improved organisation performance. The level of middle manager divergent activity is positively associated with the perception of personal influence. A middle manager's perception of influence is significantly associated with the strategy development profile of the force, negatively in relation to power-play and positively for partnership dimensions.

The next chapter considers these findings in the context of English and Welsh police forces and draws theoretical and practical conclusions.

Chapter 6 Conclusions

Having examined the findings of the study in chapter 5, this chapter pulls these findings together to consider how they answer the research questions and to set out the conclusions of the study. The research questions directing this research are:

1. **How does middle manager divergent activity influence organisation performance in the police service context?**
2. **How does external stakeholder salience influence impact on the divergent activity of middle managers?**
3. **How does the strategy development profile of an organisation influence the divergent activity of middle managers?**

The study looks at the research questions in the particular context of English and Welsh police forces. This context, and in particular the hierarchical rank structure which is common to police forces, is important for interpretation of the findings. Section 6.1 therefore first discusses how aspects of rank and hierarchy in the police force context impact on the variables and hypotheses in this study.

Section 6.2 looks at the research questions in order and considers what the findings mean for middle manager divergent activity, stakeholder salience, and strategy development in police forces. It then presents a revised conceptual model about the middle managers' role in developing strategy. Sections 6.3 and 6.4 detail how these conclusions make a theoretical contribution to the research in these areas and have practical importance for management in police forces. Sections 6.5 and 6.6 discuss the limitations of this study and the opportunities which it presents for future research. Section 6.7 concludes the thesis with some reflections on the research process and the researcher's personal learning from the study.

6.1 Influence of rank and hierarchy

Police forces have a structure of ranks which is set in statute and has changed little in over 50 years. Suggestions to change the structure have been largely unimplemented.[14] The common nature of the rank structure allows the study to bring together data from 18 police forces. However, its rigidity raises questions about the relevance to police forces of the theoretical constructs used to focus the study. There are suggestions from the data that the power of the formal hierarchy is changing as police forces adapt to meet the demands of reduced funding and greater accountability. Despite this, the researcher finds that rank remains the primary indicator of power and influence. Considerations of rank and hierarchy remain a powerful paradigm within which managers in police forces view their roles whether they are police officers or police staff.

Reference to *rank* is a common thread running through interviews. *Rank* is more often used to explain activity and attitudes than other organisational factors such as *role*, *tenure* or *experience*. A person's position in the force is predominantly defined by their *rank* and police officers of inspector rank or above are commonly addressed as 'sir' or 'ma'am' by those junior to them. The impact of this formal rank structure is revealed in this study in three ways.

First, it divides middle managers into two groups with different views about divergent activity and how strategy is developed in a police force. The study draws on Wooldridge and Floyd (1990) to define middle managers as below the executive level and above first line supervisor. This idea, that middle managers are managed, and in turn manage other managers is important for the linking-pin principle which is the basis of Wooldridge and Floyd's (2008) ideas about middle manager divergent activity. This definition however, is too broad to identify a coherent group of managers in police forces. Police forces have at least two distinct levels of managers in the middle of the organisation. First, those at chief inspector and superintendent level who the study has termed senior operational managers. This group most clearly fits the linking-pin idea of a middle manager focusing and influencing both upwards and downwards in the force. Second, those at inspector level who the study has termed operational managers who have a more local, immediate, operational focus. Operational managers are generally more focused on

[14] Most notably the Inquiry into Police Responsibility and Rewards by Sir Patrick Sheehy in 1993 recommended a reduction in the number of ranks. Following significant resistance from police, the recommendations were subsequently rejected by the Home Secretary.

the specific issues of their role. One rank higher, the senior operational managers are more focused on the responsibilities of their management level. The implication of this for middle manager divergent activity is discussed in the section 6.2.1.

The strategic role of operational managers is unclear, both to themselves, and to executive managers. ACPO refers to the inspector rank as strategic. This categorisation however, is questioned by the decision of one force which did not permit managers at inspector level to participate in the study despite them having responsibility for significant resources and core service delivery work. Additionally, operational managers wish to be consulted more but accept that their focus is on short term operational issues. Operational managers see their role as more local and reactive than strategic. They also see their influence being primarily through their line management. In this they are similar to the 'operating managers' proposed by Floyd and Lane (2000) whose role is essentially reacting to information from the environment and their line management.

Therefore, for police forces, the definition of middle manager includes managers significantly engaged in reactive decision making. Operational managers retain a predominantly reactive role in spite of the responsibility pushed down to them as a result of the reduction in the number of middle managers. There are two possible causes of this. The accepted view of the inspectors' role may be stuck in the past and has not changed to keep up with the increased responsibility. Alternatively, the structure and systems of police forces encourage operational managers to keep a reactive role. The particular influences on this layer of managers require more investigation.

Second, the impact of the rank structure is shown in the relevance of ideas of *command* as a strategic influence in police forces. The findings of this study suggest that middle managers do not see *command* as an important, distinct, separate variable influencing strategy. It is taken for granted as part of the fabric of the hierarchical structure. The implications of this are more fully discussed in section 6.2.3 in considering strategy development.

Third, the rigidity of hierarchy causes middle managers to think of their strategic activity only within formal structures and not as an opportunity to exercise any degree of autonomy. This is apparent through the focus of operational managers on their line management and the importance of the senior operational managers to whom they report. Senior operational managers see divergent activity as operating within the formal force systems of 'good ideas

schemes' and management consultation events. This could have the effect of influencing the type, and effectiveness, of the divergent activity in which middle managers engage. This more fully explored in section 6.2.1

In an organisation where managers are referred to by their rank and often wear the insignia of it on their shoulders, it is possibly unsurprising that rank has had a powerful influence. The recent changes in New Public Management, devolution of responsibility and reduction in numbers of managers have not altered this. Rank remains the key criterion defining strategic roles and the formal and perceived constrains which come with it.

6.2 Revised conceptual model and theoretical implications

Having set out in the previous section how aspects of the context of police forces affect middle managers' views and behaviours, this section now considers the findings of the study in relation to the research questions set out above. Following this, a revised model is proposed of the importance of middle manager divergent activity in police force strategy development.

6.2.1 Middle manager divergent activity

Section 6.1 described the difficulty in using a broad definition of middle manager in police forces. This is not because middle manager roles are becoming more varied (as suggested by Day, 2013), but because the four different police force ranks which fit this definition do not have a single cohesive view. Differences of *rank* have more overall impact on managers' divergent activity than differences of *office*, *role*, *experience*, and *tenure*.

Both operational managers and senior operational managers engage in divergent activity but there are significant differences between their views of this. In discussing divergent activity, operational managers referred to the line management structure and see their senior operational managers as a conduit for information and focus for ideas. Senior operational managers engagement more in divergent activity but see this as working through the formal meetings and systems within the force. Both groups are thus constrained by the formal structure of the force and there is little evidence at either level of divergent autonomous activity among middle managers which writers like Andersen (2000) argue is important for successful strategy.

The level of middle manager divergent activity is significantly associated with managers' perceptions of their personal level of *influence*. Divergent activity carries risk, as well as being a distraction from other responsibilities. Despite the existence of formal structures and systems, managers need reasons to engage. Perception of influence is a significant factor in the willingness of managers to carry out divergent activity. This association is found for both *championing alternatives* and *facilitating adaptability*, and also for both middle manager groups, despite their differing level of both divergent activity and *influence*. This suggests that the association is not contingent on role or position but important for all managers whether the divergent activity is connected with force strategy or more local issues.

The lack of association between *middle manager divergent activity* and organisation *performance* questions the relevance of divergent activity for managers in police forces. This finding suggests that the experimentation–selection idea of strategy development (Burgelman, 1991) is not relevant to the police forces studied. The principle of divergent activity is that it challenges the dominant logic by experimenting with new ideas which, if they are successful, become adopted as part of the organisational strategy. For this to happen effectively, middle managers need the freedom to try new ideas without significant risk to themselves, and systems which give confidence that new, different ideas will be welcomed and studied objectively.

The constraints of the rigidity of hierarchy restrict *middle manager divergent activity* in two ways. First, the autonomy of managers to experiment without risk is restricted. Effective divergent activity needs to be encouraged by the structures and processes within which the managers work. This fits with the findings of Andersen (2000) who suggests that formal planning processes and autonomous behaviour are complementary. They are both needed for effective strategy-making.

The focus on formal structure and hierarchy in police forces means that the conclusion of Andersen (2000) has a particular implication. The formal planning processes need to be effective for divergent activity to have any impact. Where the formal processes are not rational, or decisions are taken for political reasons or imposed from outside the organisation, it is less likely that the implications and opportunities of divergent activity will be properly considered. Therefore, within the formal structures of a police force it is important that that planning processes are seen to be rational if they are to facilitate middle manager divergent activity.

Second, the rigidity of the police force structure and hierarchy discussed in section 6.1 challenges the ability of middle managers to engage in valuable divergent activity. Figure 28 shows this as a matrix of different types of divergent activity depending on the rigidity of the structure of the organisation.

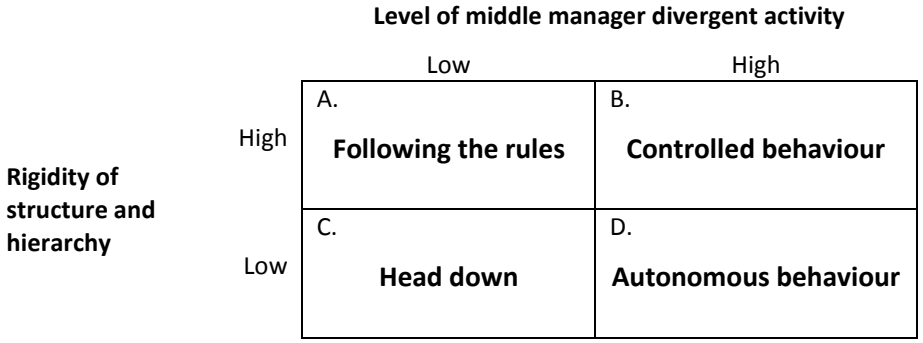


Figure 28 – How divergent activity can be influenced by structure and hierarchy

The matrix suggests that the degree of rigidity of an organisations structure and hierarchy can affect the type of divergent activity of middle managers. Box D is where high middle manager divergent activity is not constrained by structure and the result is the autonomous behaviour seen as important by Mantere (2008) and Andersen (2000). This type of activity will incorporate the experimentation envisaged by Burgelman (1990) and has the opportunity to result in the innovative ideas leading to new strategies.

Where the high level of divergent activity is within a rigid structure and hierarchy (Box B) the freedom to experiment with ideas or activities is not present. New ideas are less likely to challenge the dominant paradigm because perceived restrictions around role or fear of failure mean they are not explored. Therefore what is seen as divergent activity is likely to more concerned with development of the current strategy rather than challenging it. The findings of this study suggest that the divergent activity of senior operational managers in police forces is predominantly described by this quadrant.

The rigidity of the structure and hierarchy also impacts on two situations where middle manager divergent activity is low. In Box A, middle managers constrained by the rigidity of the structure may just follow the rules and adopt a business as usual approach engaging in the integrative behaviour of Wooldridge and Floyd (1990) and not venturing outside what Floyd and Lane (2000) see as their primary role. This approach is possibly appropriate where the importance of consistency and following rules predominates, for example in air-traffic controllers. This study

shows that operational managers in police forces also can be described in this way. Similarly it is possible that managers adopt this approach even where the structures allow them space to be more innovative (Box C). This suggests a situation where managers are demotivated and see no role for themselves in influencing strategy.

Middle managers in police forces work in a high degree of rigidity of both structure and hierarchy. Managers currently in Box A can be moved to Box B through training, development and changes to organisation systems and processes. This however will not achieve the type of divergent activity leading to challenging innovative ideas (Box D). This cannot be achieved through interventions such as training. It requires a more fundamental change in the structure of the organisation.

6.2.2 Stakeholder salience

External stakeholder salience has a positive association with middle managers' perception of *influence* but no significant direct link to the level of divergent activity. This is found for both middle manager groups in this study but the association is significantly stronger for operational managers. This contrasts with the findings of Currie and Proctor (2005) who conclude that a powerful external stakeholder (central government) constrains the divergent activity of middle managers in the UK NHS. The reasons for the difference between these findings may be seen in the conclusions of Greenley et al. (2004) and Kuratko et al. (2007) that engagement with a wider range of stakeholders increases innovation. A high salience stakeholder with whom you cannot engage is seen as a constraint. A high salience stakeholder with whom you interact can increase a manager's perception of their *influence*.

The current research looks at both national and local external stakeholders. The salience of central government is viewed as strong by police middle managers in this study predominantly because of their power. Despite this the level of central government salience is not associated with a middle manager's view of their *influence*. This is also true for the salience of PCCs. The power of these stakeholders is seen as part of the environment. It is taken for granted.

The positive association between *external stakeholder salience* and *influence* is through the salience of the Crime reduction partnership (CRP). Where the CRP is seen to have more salience, the manager perceives more *influence*. The fact that this association is stronger for operational managers can be explained as a result of their local focus, similar to that of operational managers. The positive benefit of a high salience CRP for middle managers is also seen in the

findings about impact of the *partnership* dimension in strategy development which is considered in section 6.2.3.

6.2.3 Strategy development

Despite the 20 years of experience of producing strategic plans, middle managers do not perceive that rational planning is a strong influence on strategy. The publication of plans and the extensive use of objectives to measure progress are not seen as indicators of rational thinking or working and have almost no influence on the middle managers in the study. This is shown in there being no evidence to support an association between planning or structured rationality and divergent activity (discussed in the previous section) and only a very weak link between planning and influence for operational managers. The fact that there is no evidence of an association between *structured rationality* and *influence* for senior operational managers suggests that any formal planning processes are perceived to have little strategic relevance. This questions the value of strategic planning processes to police forces. Llewellyn and Tappin (2003) suggest that strategic plans were introduced into the public sector as a means of control, and not to give a framework for strategic thinking. The limited relevance of strategic planning processes found in this study suggests that strategic plans in police forces are viewed in a similar way by middle managers.

Despite this view of the current planning processes, managers in the study were critical of a perceived lack of rationality in decision making. This suggests a distinction is seen between the formal ideas around planning and the value of evidence based decision making. This distinction may be explained in managers not seeing the formal processes of planning as any evidence that decisions are not actually made through *power-play*, or the influence of culture or external stakeholders.

The six dimensions of the strategy development profile of Bailey et al. (2000) do not fully capture the strategy development processes in police forces. The *command* dimension in the original model is not seen as a separate distinct dimension by senior operational managers. Also *partnership* working to develop strategy is seen as an important separate dimension which is not reflected in the model.

The principle of *command* in the police service is well established. Police officers leading geographical command units generally hold the title of 'BCU commander', and similar terms are

used in all operational units. Despite this, the definition of *command* as part of the *strategy development profile* has proved problematic in this study.

The *command* dimension of Bailey et al. (2000) highlights how an individual (usually the CEO) can often influence strategy through having a high degree of personal control. The influence may come from a vision resulting from a rational understanding of the problems facing the organisation. Conversely, it may not be based in rational analysis, for example where a CEO is intent on implementing a strategy which they previously used in another organisation.

The exploratory factor analysis discussed in chapter 5 and appendix I suggests that operational managers and senior operational managers differ in their view of the strategic influence of *command*. Operational managers broadly agree with the definition of Bailey et al. (2000). Senior operational managers do not see *command* as a separate dimension but either as part of *structured rationality*, or as part of the *power-play* which influences decision making in all organisations.

This difference suggests that operational managers perceive the positive aspects of *command* and senior operational managers, the influence of negative aspects. Although the views of the two groups of middle managers appear different, there is a similarity between them which reveals something about the way that the strategic relevance of *command* is seen in police forces.

Operational managers recognise *command* as an influence on strategy, but it is a view of command summed up in the three items of the scale of Bailey et al. (2000) which emphasis the role of the chief officer. These are:

Sdp1comm	A senior officer's vision is our strategy.
Sdp8comm	The chief constable determines out strategic direction.
Sdp12comm	The strategy we follow is directed by a vision of the future associated with the chief constable.

This is a view which says little about the individual. It is a statement about the structure of the organisation and how a police force works. The hierarchical and disciplined nature of the organisation has the chief constable at the top, and the rules, directly or indirectly, come from them.

This idea that *command* is seen as something which is ingrained in the structure and not related to an individual is supported by the responses about *command* from the survey. Section 5.6

shows that *command* is at the mean level of the six dimensions. It is neither seen as particularly influential, nor seen as lacking. Further, there is no evidence that the perceived level of command influences, either positively or negatively, operational managers' divergent activity. There is also no support for it influencing managers' perception of their personal strategic *influence*. The strength of the *command* dimension does not influence strategic activity of operational managers.

Command is not only seen as a weak influence in the development of strategy, the perception of *command* is of limited importance to the perceptions of *influence* held by middle managers. This may be difficult to accept in organisations where significant effort is put into the selection of executive officers and the importance of leadership. The reasons for the conclusion about *command* are unclear and more research is needed into the chief constables in the post PCC era. As discussed in chapter 4, the election of PCCs in 2012 changed the governance structures around police forces. A change of government in 2015 would probably have seen the role of PCC abolished. Half of the chief constables of the forces involved in this study have been appointed or confirmed in their post since this change. At the same time, police forces are facing significant cuts in funding. It is possible that there is still some confusion about the chief constables' position in relation to the PCC which has resulted in the perceptions about their personal strategic influence.

While *command* is seen of limited relevance in the strategy development process, *partnership* working is seen to have significant influence. The principles of partnership working in police forces are something which, in the experience of the researcher, have been discussed for decades, but are only recently becoming a reality. Three factors have come together which may explain this. First, the drive for performance has brought with it a focus on outcomes, as shown in the Home Secretary's announcement about reducing crime (Chapter 4). A number of public agencies have the ability to impact on crime levels including schools, social services and local authorities. Additionally, different parts of the police force will need to co-operate to bring together all of the skills and information needed. The most effective use of resources can only be achieved through collaborative and complementary working. Second, all public sector agencies are facing reduced funding and this is driving innovative ways of using money better. This includes police forces merging functions and agencies sharing facilities such as joint headquarters for emergency services. Third, CRPs have been in existence for more than ten years giving a statutory basis for collaborative working. These factors result in an approach to

developing strategy which relies on compromise, consensus and incremental working as the different groups co-ordinate their effort.

The partnership dimension captures these aspects in a dimension which has particular relevance to public services. The scale for measuring this dimension includes the following items.

Sdp5inc	Our strategy develops through a process of ongoing adjustment.
Sdp6pol	Our strategy is a compromise which accommodates the conflicting interests of powerful groups and individuals.
Sdp9pol	Our strategy develops through a process of bargaining and negotiation between groups or individuals.
Sdp16inc	To keep in line with our business environment we make continual small-scale changes to strategy.
Sdp31inc	We keep early commitment to a strategy tentative and subject to review.

The combination of these items describes a style of strategy development which is the opposite of *command* or *imposed*. Strategy comes from adjustment resulting from bargaining and compromise between stakeholder groups. In this it has similarities with the consensus strategy of Mintzberg and Waters (1985) where they propose that strategies *"originate in consensus, through mutual adjustment"* (p. 270). More work is required to define fully the boundaries of this dimension.

Overall the study finds that the dimensions of strategy development relevant to police forces are different to other organisations. The formal hierarchical structures, and the need to collaborate, result in managers having a different view of the influence of *command*, *political* and *incremental* working. As well as refining the strategy development profile model to fit police forces, this also exposes the impact of power.

Power-play has the strongest association with middle manager perception of influence, and their engagement in divergent activity. *Power-play* captures the attitudes towards the aspects of command and politics related to behaviour for the benefit of the stakeholder or stakeholders group, rather than the organisation. While this is not seen as a powerful influence in police forces, changes in the level of *power-play* are connected with significant changes in perceptions of *influence* and divergent activity. This adds to the work of Raman (2009) who finds that middle managers are affected by political working in car manufacturing companies in India. The link between power-play and divergent activity is mediated by influence. Perception of power-play is associated with the engagement of middle managers in divergent activity because it impacts on influence.

6.2.4 Revised conceptual model

Figure 29 shows a revised conceptual model of the involvement of middle managers in the development of strategy in police forces. This model broadly supports the research model proposed in section 2.7 and shows how the context influences the relationships identified. It develops the research model in three ways. First, it acknowledges the importance of ranks and how this influences divergent activity of middle managers. Second, it recognises the role of executive management in setting the organisational environment in which divergent activity take place. Third, it emphasises the importance of rational working within the organisation.

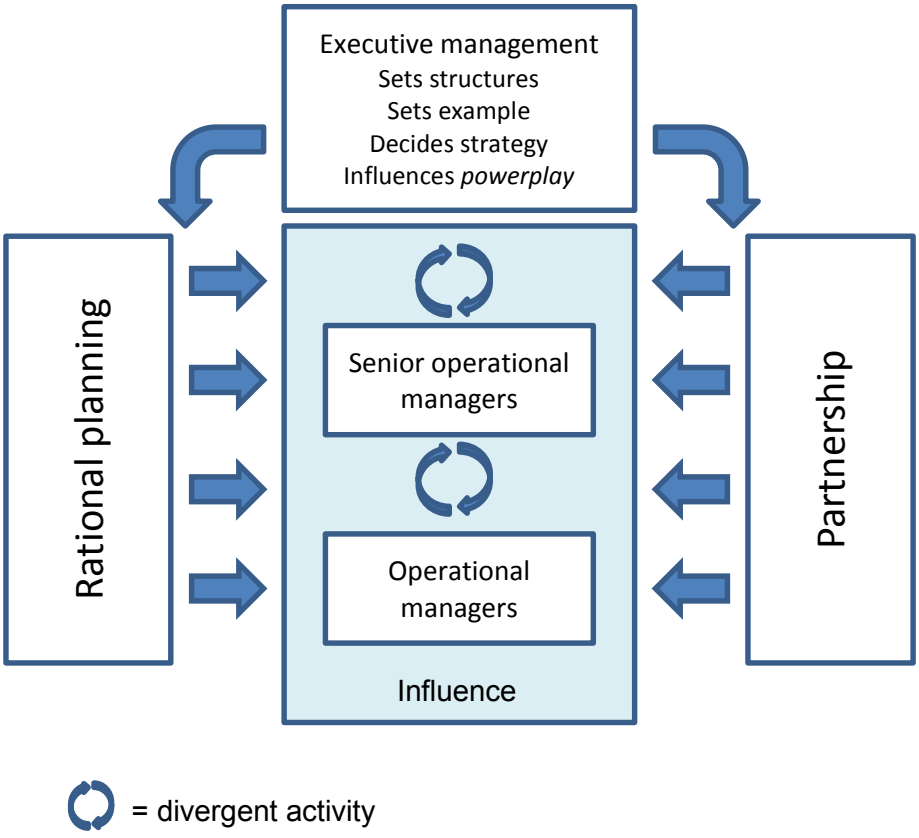


Figure 29 – model of involvement of middle managers in strategy development in police forces

Figure 29 shows that divergent activity takes place on more than one level. Operational managers' divergent activity is focused on influencing their line management. Senior operational managers have a broader focus and influence executive management. The level of divergent activity is linked to the personal perception of *influence*. Police forces wanting to increase *middle manager divergent activity* need to consider how the internal environment of the force supports this perception of *influence.*

Executive management facilitate the divergent activity of middle managers in two ways. First they influence the organisational culture and the way that rank is viewed within their force. The rigidity of hierarchy is linked to middle managers being unwilling to challenge dominant logic and to constrain activity with formal processes. Second, executive managers ensure that the structures through which divergent activity takes place are effective. The more that middle managers perceive their ability to collaborate effectively and do not perceive the presence of *power-play*, the more likely they are to engage in divergent activity.

The rationality of strategic decision making, and the extent to which decisions flow from analysis and evidence-based working, give confidence that ideas will considered on their merit giving a basis for suggestions to be championed. Similarly, the ability to develop ideas in partnership also links to positive perceptions of middle managers about their role, and their willingness to engage in divergent activity.

This revised model refines the original research model and allows a focus on particular factors of relevance to the police force environment. The following sections set out the contributions which this study makes to both theory and practice.

6.3 Contributions to theory

This study makes a contribution to the theory around the antecedents and impact of middle manager divergent activity in seven ways. First, it extends the context in which these subjects have been studied. Most of the research in relation to middle managers focuses on private sector companies. Some have included generic public sector subjects but without exploring the particular implications of the different sector. None have looked at the particular environment of police forces. The study particularly confirms that Floyd and Wooldridge's (1992) model of divergent activity has relevance to the structured hierarchy of middle managers in police forces.

Second, it gives empirical support to the idea posited by Floyd and Lane (2000) and others that managers in the middle of organisations occupy more than one level. Both levels found in police forces occupy linking-pin positions (Likert, 1961), but the strategic focus is different. Senior operational managers fulfil the roles described by Wooldridge et al. (2008) in influencing the ideas and decisions of top management. Operational managers play a similar role involving divergent activity role but with a focus on influencing their line managers.

Third, it adds to knowledge about formal strategic planning in organisations where the process is well established and imposed by government. The study supports the conclusions of work like that of Brews and Purohit (2007) in recognising an association between strategic planning and organisation performance, but finds no evidence that it significantly influences the views or divergent activities of middle managers. Despite this, rationality in decision making is important for middle managers and is associated with less *power-play* and more partnership working, both of which have a significant impact.

Fourth, it identifies the importance of *influence*, and the mediating role of *influence* in explaining the association between strategy development process and divergent activity. This assists understanding of the mechanism through which antecedents of middle manager divergent activity work.

Fifth, the study exposes differences in the view of middle managers about strategy making in police forces which contrasts with other organisations. This develops the work on strategy development processes and suggests that the context of police forces causes the dimensions of strategy development to be different to other sectors, particularly in relation to *command*.

Sixth, the perception of *power-play* is significantly associated with the level of influence and divergent activity. This extends understanding of the antecedents of middle manager divergent activity. It identifies a factor which helps describe how the organisational environment influences managers.

Seventh, it exposes how external stakeholder salience can have both a positive and negative impact on middle managers depending on the level of collaboration. Where an external stakeholder is one with whom managers can work collaboratively, the level of salience is positively linked to managers' perception of their own *influence*.

6.4 Contributions to practice

The findings of this study have implications for the structure, roles and training of management in the police service at both middle and executive levels. These are:

- reviewing the use of rank;
- reassessing the strategic role of the chief inspector rank;

- reconsidering the strategic role and management style of chief officers;
- changing the focus of strategic planning processes; and
- recognising the impact of local partnership arrangements.

First, the study shows that ideas about formal rank may constrain structural and cultural change in the police service. More than half of the police force strategic plans in England and Wales say they want people within the organisations to be more innovative and flexible. This is also a commonly heard exhortation from speakers at policing conferences. Despite this, and the increasing variety of roles and specialisms within policing, the rank held by a manager appears to be the biggest influence on their strategic perceptions and behaviours. The rigidity of the rank structure constrains the thinking of managers. If the police service wants a more innovative and flexible workforce, there is a need to change the way in which rank is seen and used.

Second, recognising the differences, in attitude as well as role, between inspector and chief inspector ranks will allow much more focused training and assessment of both levels. Currently these two ranks are part of the staff association which also includes constables and sergeants. Additionally, in the experience of the researcher, inspectors and chief inspectors are often trained on the same courses and referred to inside the service as 'inspecting ranks', reinforcing an idea of similarity of role. This indicates the way the service does not properly take into account the strategic differences between these ranks that this study has exposed. The historical factors which have caused this grouping of ranks are not relevant for the roles they perform today. This study has shown that managers at chief inspector level share perceptions and ideas about their strategic role with colleagues at superintendent level. Redefining the chief inspector rank to acknowledge this would allow the strategic roles of all levels to be more clearly understood.

Third, the findings of the study question the extent to which chief constables are seen as leaders setting the direction of the organisation or merely the current incumbent of the top role in a bureaucratic structure. The unexpected results in the study in relation to the strategic importance of *command* suggest that managers in police forces do not look to their chief officer for strategic direction. Middle managers generally see their chief constable as a manager responsible for ensuring that the internal environment is set, encouraging rational thinking, partnership working and discouraging power-play. This has implications for the way in which executive managers are selected and trained.

Fourth, the impact of strategic planning processes on forces needs to be reassessed. This study suggests that currently the influence of strategic planning is low, either as a basis for strategic decisions, or as a process for involvement and generation of ideas. Force-wide formal processes on their own are not the most effective way to encourage the active participation of middle managers. Divergent activity is encouraged through partnership and a lack of *power-play*. Top managers need to ensure that local structures are in place to constrain powerful groups and allow communication and collaboration of middle managers with counterparts inside the organisation.

Fifth, the study shows that effective local partnerships with which managers can interact outside the service have a positive impact on the strategic behaviour of police middle managers. Currently local partnerships are seen to have little power. Increasing the salience of these groups by allowing an increase in their power has the effect of not only allowing police managers to pursue local objectives more effectively, but also to play a greater strategic role in the force.

6.5 Study limitations

A single study can only explore a limited number of factors influencing a phenomenon as complex as the causes and outcomes of middle manager activity. This section considers the limitations of this study and how this constrains the interpretation of the conclusions reached.

Any study which looks at a single organisation, even one split in a large number of semi-autonomous parts, will be limited in its scope. The 18 police forces who participated in this study are at a particular point in their evolution, and have been subject to significant recent changes. Jones and Newburn (2002) suggest that focusing on the changes down-plays the consistency, but Brain (2013) argues that police forces are going through a revolution in their role and governance. The introduction of New Public Management principles, and particularly the drive for performance, is the background to delayering, the introduction of PCCs and reduction in funding. The middle managers involved in this study have worked through a particular time of policing which will have resulted in a particular perspective about their role. The study therefore makes no claims about the transferability of its findings, either to other parts of the public service or even to other police forces. More work is required to test whether the conclusions of this study have application to other organisations in the public sector.

The study is cross-sectional and relies largely on quantitative data gathered through a self-reporting internet survey. While the qualitative data gathered through interviews assists the interpretation of the survey results, the cross sectional nature of the study means that the findings are predominantly about associations rather than causality. For example, the study argues that a perception of political working in the organisation (*power-play*) leads to a decreased perception of fairness and logic in the strategy development process. This in turn results in a decreased perception of influence. The overall design of the study means that it is not possible for the researcher to rule out the possibility that the causal relationship is in the other direction. Someone could argue that a manager not perceiving individual influence will result in a perception that political working is high in the organisation.

The study only gathers data from middle managers, and not the views of other actors in the strategy development process such as chief constables, PCCs or members of CRPs. This means that the study has looked at one of a number of relevant views which may provide alternative perspectives on middle manager activity. It is possible that, despite the efforts to reduce bias, participants exaggerated their level of divergent activity. This could be related to the action of social desirability bias. Merely, the fact that a survey is asking questions about divergent activity may cause a manager to think that they should be engaging more. Exploring other actors' perceptions of the level of middle manager divergent activity, or using a different methodology, would add to this study's findings.

The unit of analysis of this study is the individual middle manager. This approach is important because perceptions and motivations to engage in activity are formed, and acted on, by the individual. However, middle managers are predominantly part of management teams. Decisions and actions are the result of team discussion. This could cause a disparity in the link between perceptions and activity as influences of other team members need to be taken into account.

As discussed in chapter 2, measuring organisation performance "*is perhaps one of the thorniest confronting the academic researcher*" (Venkatraman and Ramanujam, 1986 p.181). For a public sector organisation this can be particularly difficult because the work of the organisation needs to balance the demands of multiple constituencies of stakeholders (Berry, 2007). The performance measures used in this study are chosen because they represent the full range of important measures of police effectiveness while minimising comparison problems between forces. Micheli and Neely (2010) note however that 72 different performance indicators are

used to measure police force performance and that efforts over two decades have not resulted in a simple measure of comparative performance of forces. The use of an additional subjective measure to complement the archival data is again subject to the limitations of it being a middle manager's view. Other managers in the force or external stakeholders may give different perspective.

The next section looks at the opportunities for further research which this study has revealed.

6.6 Opportunities for further research

The findings of this study raise opportunities for further research. Police management is an under-researched field. The study highlights the view of middle managers that strategic planning processes in police forces have little influence on strategies and are not based sufficiently in rational analysis. While critical views of the value of strategic planning are common, the reasons why individual managers form perceptions of strategy processes are not clear. Additionally, while the perception of strategy development processes influences middle managers, there needs to be a broader view to consider whether the time and effort expended on strategic planning is valuable to the organisation. To what extent do strategic planning processes guide top management teams, either through the setting of objectives or through being a learning process of the type suggested by Kaplan and Beinhocker (2003).

The strategic role of the chief constables of police forces is questioned by this study. The view taken of certain aspects of the *command* dimension raise issues about the personal influence of chief constables on the strategy of their force. The introduction of elected PCCs is possibly the biggest potential change in the chief constables' role in a century (See (Brain, 2013) for a full discussion). The implications of this change are still not clear, especially in relation to the chief constable's position as the strategic leader of their force. As well as the practical implications that this has for the police service, it raises questions about the link between leadership and strategy. The study identifies *partnership* as an important dimension of strategy development in police forces. The degree to which *partnership* is perceived as part of the strategy development profile impacts on middle managers. The constituent parts of the partnership dimension and the reasons for its influence require more exploration.

6.7 Reflections on the research process and the personal learning of the researcher

This section concludes the thesis with some personal reflections on my experience of the doctoral process. It sets out my personal motivations for starting the research and discusses how my values as a researcher and a management consultant have been influenced by the work.

6.7.1 How I started

I started the study with the objective of adding something to management in the police service, an organisation which I have been part of, and associated with, for over 40 years. I was exposed to new ideas of management thinking when I completed an MBA when I was a police inspector. Through the second half of my career I was in a position to consider and experiment with the application of business ideas within policing. I was however, aware that there was little research around British police management which tested the value and validity of management thinking in a policing context.

A significant amount of operational police work is associated with the gathering and presentation of evidence. However, this evidence-based way of working is less apparent in the management of police forces. This can result in a dismissive attitude of new management ideas such as the introduction of NPM which is discussed in chapter 4 of this thesis. The extreme, but not uncommon, result is that management becomes a derogatory term associated with bureaucracy and cost, compared to the idea of leadership which is associated with success. My objective in starting the research was to establish whether the strategic management ideas which had been introduced during my career actually made a positive difference to the effectiveness of policing.

In chapter 3 I explain how my background in the natural sciences influences me to adopt a more positivist perspective. I believed that the shortage of good empirical research into police management was because the culture of policing had constrained a willingness to see such study as worthwhile. I was confident that the answers were there to be found if the questions could be asked in the right way. While I was always aware that the acceptance of findings by police managers would not be simple, I saw this as a separate problem to establishing the findings.

6.7.2 My experience

I believe that my focus on the contribution I wanted to make to police management actually delayed my study. It initially prevented me from fully exploring the subject and establishing robust research questions. My thinking was constrained by my unrealistic expectations and the importance with which I viewed them. Instead of searching for a contribution which would be a small but valuable step on the way towards more effective management in police forces, I was pulled back to the broad ideas of how I perceived the problem.

Eventually my research progressed and this was linked to me reassessing two assumptions which had previously guided my thinking. The first concerned my belief in the primacy of rational processes and thinking. The second was about the nature of knowledge and my ontological view of the world.

I am aware that my early background in natural sciences set the foundation of my belief in the power and accuracy of mathematics as a way of viewing the world. This belief persisted despite thirty years as a police manager and exposure to the irrationality, unpredictability, and sometimes duplicity of people in organisations. In a very well established psychological test, Myers and Briggs argue that following Jungian thinking, everyone has natural preferences. One of these preferences falls between *thinking*, where your focus is on getting the right answer, and *feeling* where your focus is about how people feel about the solution. Many experiences of taking this test confirm that my strong preference for *thinking* is clear.

This study has required me to challenge the idea that there are right answers for everything – and consider whether there is, for anything. To paraphrase Voltaire, I now do not see this as a particularly uncomfortable position, just a rather more sensible alternative to the absurd position of certainly.

6.7.3 My conclusions

Overall my experience has reaffirmed for me the importance of middle managers in all organisations and especially in policing. During the research I spoke to many middle managers, most of whom believed in the value of their role and were very interested in the results of the research. One inspector I spoke to said, “middle managers save the bacon of the organisation”, but it is more than that. I still believe that managers in the middle of organisations are the driving force for the success of the organisation, the source of successful emergent strategies.

I started off this journey thinking that I could prove that this was true. I finish it realising that this is not only an unrealistic ambition, it is a bad place to start looking at anything with the complexity of police management. If through my efforts I have shone a little more light on a difficult issue which has allowed some to look at the issue slightly more clearly - that is a worthwhile contribution.

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Appendix A Online survey

Strategic Leadership Survey

1. Strategic Leadership Survey

Thank you for helping with this study. It should take you no longer than 10-15 minutes to complete.

Your views are important to help me understand the full contribution of leaders in the middle levels to the success of their force.

The information you provide will only be seen by me and used for the purpose of the study. No individual will be identified in any of the publications resulting from this work.

The survey is gathering the views of police officers between inspector and chief-superintendent ranks, and police staff members with similar level of responsibility. It is part of research I am doing towards a doctorate at Henley Business School.

The survey is split into 4 parts. In part 1 you are asked how often you are involved in different types of activity. Part 2 asks about your perception of how strategy is decided in your force. Part 3 asks for your views about the relative influence of different groups of stakeholders. Part 4 asks for some broad information relating to your role.

Thank you again for your help with this study. Please click on 'Next' below to continue.

Garry Elliott

Strategic Leadership Survey

2. Strategic Leadership Survey

Part 1. Strategic Activity of Middle Level Leaders

The following questions assess the extent to which you are involved in some activities relating to strategy development in your force.

For each activity choose one answer only which most closely describes how frequently you are involved in this activity.

On average, how often do you:

	Never	Rarely (Less than once a year)	Sometimes (1 – 3 times a year)	Often (4 -12 times a year)	Always (More than once a month)
Put forward new proposals or projects to higher level managers	○	○	○	○	○
Evaluate the merits of proposals generated in your unit, encouraging and championing some, discouraging others	○	○	○	○	○
Justify and define the role of new proposals to managers above you	○	○	○	○	○
Facilitate experimental proposals being tried in your unit	○	○	○	○	○
Locate and provide resources for trial projects	○	○	○	○	○
Present arguments to higher level managers in order to try out experimental proposals	○	○	○	○	○
Encourage informal discussion and information sharing among more junior staff	○	○	○	○	○
Relax policies and procedures in order to get new projects started	○	○	○	○	○
Search for new opportunities and bring them to the attention of higher level managers	○	○	○	○	○

3. Strategic Leadership Survey

Part 2. Strategy Development

The following questions gather your views about how strategy forms in your force. To answer the questions, please think of the strategy of your force just as the way it does things. This includes the approaches it takes, the priorities it follows and the way it uses resources to achieve aims. These things may be set out in a strategic plan or they may just have emerged from the actions of people at all levels.

For each statement, please choose one answer only which most closely describes your view of the way that strategy develops in your force.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	Not able to say
A senior officer's vision is our strategy	○	○	○	○	○	○
Our strategy is made explicit in the form of precise plans	○	○	○	○	○	○
We are not able to influence our working environment; we can only buffer ourselves from it	○	○	○	○	○	○
The attitudes, behaviours, rituals, and stories of this force reflect the direction we wish to take it in	○	○	○	○	○	○
Our strategy develops through a process of ongoing adjustment	○	○	○	○	○	○
Our strategy is a compromise which accommodates the conflicting interests of powerful groups and individuals	○	○	○	○	○	○
There is a way of doing things in this force which has developed over the years	○	○	○	○	○	○
The chief constable determines our strategic direction	○	○	○	○	○	○
Our strategy develops through a process of bargaining and negotiation between groups or individuals	○	○	○	○	○	○
There is resistance to any strategic change which does not sit well with our culture	○	○	○	○	○	○
We have precise procedures for achieving strategic objectives	○	○	○	○	○	○
The strategy we follow is directed by a vision of the future associated with a senior officer	○	○	○	○	○	○
Our strategies emerge gradually as we respond to the need to change	○	○	○	○	○	○

4. Strategic Leadership Survey

Part 2. Strategy Development (continued)

For each statement, please choose one answer only which most closely describes your view of the way that strategy develops in your force.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	Not able to say
Our freedom of strategic choice is severely restricted by our external environment	○	○	○	○	○	○
When we formulate a strategy it is planned in detail	○	○	○	○	○	○
Our strategy is continually adjusted as changes occur in our environment	○	○	○	○	○	○
We have definite and precise strategic objectives	○	○	○	○	○	○
We are severely limited in our ability to influence the environment in which we operate	○	○	○	○	○	○
To keep in line with our environment we make continual small-scale changes to strategy	○	○	○	○	○	○
Our force's history and experience guides our search for solutions to strategic issues	○	○	○	○	○	○
The vested interests of particular internal groups colour our strategy	○	○	○	○	○	○
We have strategy imposed on us by those external to this force, for example the government	○	○	○	○	○	○
We have well-defined planning procedures to search for solutions to strategic problems	○	○	○	○	○	○
Influences outside this force determine our strategic direction	○	○	○	○	○	○
The strategies we follow develop from 'the way we do things around here'	○	○	○	○	○	○
Many of the strategic changes which have taken place have been forced on us by those outside the force	○	○	○	○	○	○

5. Strategic Leadership Survey

Part 2. Strategy Development (continued)

For each statement, please choose one answer only which most closely describes your view of the way that strategy develops in your force.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	Not able to say
The information on which our strategy is developed often reflects the interests of certain groups	○	○	○	○	○	○
Our strategy is based on past experience	○	○	○	○	○	○
We carefully assess many alternatives when deciding on a strategy	○	○	○	○	○	○
Our strategies often have to be changed because certain groups block their implementation	○	○	○	○	○	○
We keep early commitment to a strategy tentative and subject to review	○	○	○	○	○	○
The strategy we follow is dictated by our culture	○	○	○	○	○	○
Our strategy is closely associated with a particular individual	○	○	○	○	○	○
Barriers exist in our environment which significantly restrict the strategies we can follow	○	○	○	○	○	○
Our chief constable tends to impose strategic decisions (rather than consulting the top management team)	○	○	○	○	○	○
We evaluate potential strategic options against explicit strategic objectives	○	○	○	○	○	○
We make strategic decisions based on a systematic analysis of our environment	○	○	○	○	○	○
We tend to develop strategy by experimenting and trying new approaches	○	○	○	○	○	○
The decision to adopt a strategy is influenced by the power of the group sponsoring it	○	○	○	○	○	○

Strategic Leadership Survey

6. Personal influence

This question assesses your perception of the performance of your force and your own influence on force strategy.

Looking overall, what is your view of the performance of your force compared to other forces in England and Wales? Please choose one answer only which most closely describes your view

Significantly below average	Below average	About average	Above average	Significantly above average
○	○	○	○	○

How much influence do you feel you have on the strategy followed by your force? Please choose one answer only which most closely describes your view.

Not at all						A great deal
○	○	○	○	○	○	○

7. Strategic Leadership Survey

Part 3. Stakeholder Influence (Power)

The following three questions gather your views on the influence that different groups of stakeholders have over the strategies and priorities followed by your force.

To what extent do you think that each of the following groups can enforce their views on the strategies and priorities followed by your force?

For each group, choose one option only which most closely fits your view of the POWER held by that group

	None at all	Somewhat low	Neither high nor low	Somewhat high	Very high	Not able to say
Force ACPO team	○	○	○	○	○	○
Staff associations/Unions	○	○	○	○	○	○
Police and Crime Commissioner	○	○	○	○	○	○
Central government	○	○	○	○	○	○
Operational police officers	○	○	○	○	○	○
Crime Reduction Partnerships	○	○	○	○	○	○
Police staff	○	○	○	○	○	○

8. Strategic Leadership Survey

Part 3. Stakeholder Influence (Legitimacy)

To what extent do you think that each of the following groups has a legal or moral claim for their views to be taken into account?

For each group, choose one option only which most closely fits your view of the LEGITIMACY of that group

	None at all	Somewhat low	Neither high nor low	Somewhat high	Very high	Not able to say
Operational police officers	○	○	○	○	○	○
Force ACPO team	○	○	○	○	○	○
Staff associations/Unions	○	○	○	○	○	○
Police staff	○	○	○	○	○	○
Crime Reduction Partnerships	○	○	○	○	○	○
Police and Crime Commissioner	○	○	○	○	○	○
Central government	○	○	○	○	○	○

9. Strategic Leadership Survey

Part 3. Stakeholder Influence (Urgency)

To what extent do you think that each of the following groups demand an urgent response from your force?

For each group, choose one option only which most closely fits your view of the URGENCY with which the views of that group should be treated.

	None at all	Somewhat low	Neither high nor low	Somewhat high	Very high	Not able to say
Central government	○	○	○	○	○	○
Staff associations/Unions	○	○	○	○	○	○
Police and Crime Commissioner	○	○	○	○	○	○
Police staff	○	○	○	○	○	○
Operational police officers	○	○	○	○	○	○
Crime Reduction Partnerships	○	○	○	○	○	○
Force ACPO team	○	○	○	○	○	○

10. Strategic Leadership Survey

Part 4. Important information

Thank you for completing the survey so far. It is nearly finished. The following information is very important for me to analyse your responses. It will only be seen by me and all the individual responses will be destroyed at the end of the study. The collective analysis will be non-attributable. No individual or force will be identified in the study.

Are you a police officer or police staff?

- ○ Police officer
- ○ Police staff

What is your rank or grade? Please choose the option from the following list which most closely identifies this.

- ○ Inspector or police staff equivalent
- ○ Chief Inspector or police staff equivalent
- ○ Superintendent or police staff equivalent
- ○ Chief Superintendent or police staff equivalent

What is your current role?

- ○ Member of geographical operational unit (e.g. BCU, Division or similar)
- ○ Member of HQ operational unit (e.g. CID, Professional Standards or similar)
- ○ Member of HQ policy unit
- ○ Other

If 'other' please state your role

How many personnel do you have directly reporting to you?

- None
- Less than 5
- 6 to 10
- More than 10

How many years (rounding up) have you been in your current role?

- 1 year
- 2 years
- 3 years
- 4 years
- 5 years
- More than 5 years

Have you had experience as a manager in a job outside policing?

- Yes
- No

In due course, it would be helpful for me to speak to a small number of people who completed this survey about their views. If you would be willing to take part in a short (30 - 45 minutes) telephone interview, please put your email address in the box below.

You have now completed the survey. Thank you very much. If you have any comments about the study please add them below. If you would like more information about its results, please fill in your email address below. Thank you again.

Appendix B Interview Guide

The following guide was used to structure the interviews in this study.

1. **Introduction** – confirm identity of interviewee – check time available – explain research – confirm they are aware that there is not compulsion to take part – their views will be anonymous only seen by me – record of interview will be destroyed if they ask, and in any event at the end of the study.

2. **Establishing context** – "Before we start, could you explain your role to me and how long you have been doing this"

3. **Influence** – "In the survey you answered that you thought your influences was [X]. Why did you think that? How do you influence?

4. **Follow up** (if not already covered) "Who or what do you think has the biggest influence on the strategy followed by your force?"

5. **Police and Crime Commissioner** – "How have things changed since the arrival of the Police and Crime Commissioner?"

6. **Divergent activity** – "If you have good ideas about improving the performance of the force, how easy is it for you to put those forward so that they are considered?"

7. **Specific probe about strategy development** – "In the survey you answered that [Question X] was [Y]. Could you explain your reasons for this?"

8. **Concluding** – Thank you – reiterating what will happen to what they have said – ensuring that they are aware they can contact me if they wish.

Appendix C Coding template developed through analysis of interviews

1. Middle manager divergent activity
    1.1. Consultation
    1.2. Responsibility pushed down
    1.3. Importance of formal systems
    1.4. Access to chief constable
2. External stakeholder salience
    2.1. Police and Crime Commissioners
    2.2. Crime reduction partnerships
3. Strategy development profile
    3.1. Rationality
    3.2. Internal politics
    3.3. Influence of the chief constable
    3.4. Culture
4. Impact of hierarchy and structure
    4.1. Rank
    4.2. Line management
5. External environment
    5.1. Impact of funding cuts

Appendix D Letter to chief constables

Garry Elliott
Doctoral Research Associate
Henley Business School
Greenlands
Henley-on-Thames
Oxfordshire
RG9 3AU

Phone
Email

Chief constable's name
Chief Constable
Address of force HQ

date

I am writing to ask if you would be able to assist me with a doctoral study I am carrying out through Henley Business School. This study looks at the strategic activity of middle level leaders in the service. I am a retired police superintendent and was involved in working around and teaching strategic planning in the last part of my career. I believe that the study will give valuable insights for the role of leaders and managers in the middle levels of the police service.

I would like to circulate a survey to police officers and police staff in middle management positions (inspector to chief superintendent and police staff with similar responsibility) in the Cheshire Constabulary. This would entail sending an email inviting them to access an on-line survey which would take about 10 minutes to complete. The responses would be anonymous. The results will be used in aggregate and no individual or force will be identified. As a gesture of appreciation to those helping with this study I would offer to make a small donation to a Cheshire Constabulary charity for every response received. I would also be keen to share the aggregated results of the survey with the force.

I have been able to pilot the survey in five forces and am confident that it is valid and that the study is important. I hope you will be able to help. I would be very happy to let you have copies of the survey or to visit you, or someone on your behalf, to discuss it in more detail.

Garry Elliott

Appendix E Emails to middle managers

Recognising the value of middle level leaders.

I am currently studying for a doctorate through Henley Business School looking at the development of strategy in police organisations. I believe that the study is important for management in the police service but particularly in relation to the service recognising the value of leaders in the middle levels of forces.

To complete this research I need to gather the views of police officers and police staff at all middle and senior levels and I hope that you will be able to assist me. Below there is a link to an online survey which should take about 10 - 15 minutes to complete. Please, use this link, or cut and paste the address to gain access to the survey. The survey is completely anonymous and no individual or force will be identified in the study.

The survey can be found at:

https://www.surveymonkey.com/s/StrategicLeadershipSurvey

Thank you in advance for your help with this. To show my appreciation for your help - for every completed survey received I will donate 20p to a [Police force] Charity.

If you would like to know more about the study or have comments about it, please contact me.

Garry Elliott

Appendix F Follow-up emails to middle managers

Recognising the value of middle level leaders.

About a week ago you will have received an email inviting you to contribute to a survey about strategic leadership and the role of middle managers. If you have been able to contribute already, I am most grateful – thank you. If you have not had a chance to look at the survey, it will be there for another week. Please find the time if you can. Completing the survey will only take 10 – 15 minutes and it is important that I can gather as many views as possible.

The survey can be found at:

https://www.surveymonkey.com/s/StrategicLeadershipSurvey

If you would like to know more about the study or have comments about it, please contact me.

Garry Elliott

Appendix G Email to prospective interviewees

Recognising the value of middle level leaders.

Thank you for taking the time to complete the on-line Strategic Leadership Questionnaire recently. I am most grateful. Also thank you for offering to take part in a telephone interview and if possibly I would like to pursue your offer.

The interview is likely to take about 30 – 45 minutes and will focus on your views about your strategic role in [the force] and to explore in more detail the reasons behind some of your answers on the survey.

If you are still able and willing to take part in an interview, please email me back a suitable day and time when I can phone you.

Please be aware that there is no compulsion to take part in the interview and you will be free to stop it at any time. Your views will be completely anonymous. No individual will be identified in my thesis or any work relating to it. The notes I make of the interview will only be seen by me and will be destroyed if you request. In any event, records of the interview will be destroyed following completion of the study.

Thank you again for supporting this study. I look forward to hearing from you.

Garry Elliott

Appendix H Screening and cleaning. Dealing with gaps in the data. Outliers and tests for normality

Screening of the data was carried out in accordance with the guidelines in Hair et al. (2010) who recommend a four stage process which considers the type, extent and randomness of missing data.

Thirty-seven respondents had not given details of their rank or grade. As the results of the pilot study highlight the importance of this response in analysing the data, these responses were removed from the analysis. One respondent was found to have completed over 75% of responses with the answer '4'. These were viewed as unrealistic responses and were deleted from the analysis. Fifteen respondents had not answered more than 25% of the survey and had not answered at least three questions for each variable. This questioned the reliability of the responses and following Hair et al. (2010), these responses were not included in the analysis. This left 687 usable responses representing a response rate of 14.7%.

All questions in the survey had a least one missing item of data. An analysis of these gaps revealed that this amounted to more than 3% of the answers in only 4 of the 71 questions. No pattern of missing answers was revealed in relation to force, rank or role of the respondent. Additionally there was no pattern of missing data relating to any particular variable. An independent sample t-test compared the Performance scores of cases with no missing data and those where some data was missing. There was no significant difference in scores ($t (N=689) = 0.657$, $p = .511$ two tailed). The difference in means was also very small (Eta squared = .0006) (Cohen, 1988). This suggested that the group of cases with missing data was not significantly different to the group of other responses. The cases with missing data were retained in the analysis and data imputed into any gaps.

Normality and dealing with outliers

As the data collected was subject to parametric analysis the variables in the research model were inspected to see if they were normally distributed. Initial inspection of the data showed that skew was less than .65 and kurtosis less than .75 and therefore under the value of 1.0 recommended as a measure of normally distributed data by Hair et al.(2010).

A Kolmogorov-Smirnov test showed however that all of the variables were non-normally distributed ($D= .050 - .250$, $p<.0001$). However, Hair et al. (2010) suggests that tests of normality can be too sensitive for large samples and Field (2009) recommends that they should not be used. Hair et al. (2010) also suggest that the problems caused by non-normality of data diminish for large samples.

Following the guidance of both Hair et al. (2010) and Field (2009) a visual inspection of the histograms of the data showed that only the Influence variable appeared not to be distributed normally, having a marked positive skew. Transforming the data using a log or square root function resulted in a reduction in the skew but increased kurtosis. As the original analysis had suggested that the skew was within acceptable limits and following the guidance of Hair et al (2010) about the low impact of non-normality on a large sample, the researcher decided not to transform the data.

Inspection of the data revealed outliers for all of the variables apart from Influence and sdpplann. However, there was a less than 1.16% difference between the mean and trimmed mean for the remaining variables. This suggested that the impact of outliers for these variables was small. An analysis of the outliers did not reveal any patterns relating to particular respondents or to particular variables. The researcher decided there was no reason to adjust the outlier scores.

The pilot study had found that the sample collected could not be seen as a homogenous whole and divided into subsamples based on rank. Guided by this result the sample was examined to see if there was bias as well as the extent to which it could be viewed as a single homogenous group.

As the response rate was relatively low, non-response bias was considered. Difference between early and late responders was analysed on the principle that late responders may be similar to non-responders (Armstrong and Overton, 1977). An independent samples t-test found there was no significant difference in the dependent variable (Performance) score of early and late responders. ($t(N=238) = 0.462$, $p = .645$ two tailed). This suggests that non-response bias was not a problem.

Appendix I Results of exploratory factor analysis

Operational managers

The 39 items of the scale were subjected to PCA using SPSS version 19. Prior to performing PCA the suitability of the data for factor analysis was assessed. The Kaiser-Meyer-Olkin value was .853 which exceeds the recommended value of .6 (Kaiser, 1970). Bartlett's test of Sphericity (Bartlett, 1954) was statistically significant ($p<.001$) supporting the factorability of the correlation matrix. Oblique rotation (Oblimin) was chosen as the pilot study had shown that there may be correlation between the components.

Six items of the original scale were found to cross-load onto more than one component, or to load much lower than the other items of the component. These are shown in Table I1. Consideration of these items concluded that their removal would not damage the theoretical comprehensiveness of the construct. Following discussion with subject matter experts at the Police College the researcher concluded that these items were less significant in the context of policing organisations for this level of manager and the six items were removed from the analysis.

Code	Item	Reasons for removal
Sdp3enf	We are not able to influence our working environment; we can only buffer ourselves from it.	Cross-loading onto Planning and Enforced choice components
Sdp4cult	The attitudes, behaviours, rituals and stories of this organisation reflect the direction we wish to take it in	Item had low loading on Culture component (.394) compared to other items (>.583)
Sdp9pol	Our strategy develops through a process of bargaining and negotiation between groups or individuals	Item had low loading on Incremental component (.390) compared to other items (>.561)
Sdp33comm	Our strategy is associated with a particular individual	Cross-loading on Political and Command components
Sdp34enf	Barriers exist in our environment which significantly restrict the strategies we can follow	Item had low loading on Enforced Choice component (.303) compared to other items (>.456)
Sdp38inc	We tend to develop strategy by experimenting and trying new approaches	Cross-loading on incremental and Enforced Choice components

Table I1 - Items removed from SDP scale - operational managers

Exploratory factor analysis of the remaining 33 items extracted 6 components explaining 52.8% of the variance. The resulting six components explained 18.3%, 13.3%, 7.2%, 5.5%, 4.3 and 4.1% of the variance respectively and replicated the six dimensions identified by Bailey et al. (2000). The result of this analysis is at Table I2.

Analysis of the correlation between components found a medium strength (Cohen 1988) correlation between *political* and *enforced choice* (r=.303), and *planning* and *incremental* (r=.284). This justified the use of Oblique rotation in the EFA.

	Component					
	Planning	Political	Enforced	Command	Incremental	Cultural
Sdp17plann	**.748**	-.011	.078	.112	-.001	.110
Sdp11plann	**.736**	.104	.025	.107	-.028	-.052
Sdp2plann	**.733**	-.155	.136	.134	-.115	.021
Sdp23plann	**.731**	.016	-.055	-.041	.072	-.067
Sdp15plann	**.699**	-.117	.064	.034	.106	-.020
Sdp37plann	**.694**	-.056	-.049	-.003	.183	-.025
Sdp36plann	**.677**	-.024	-.032	.056	.166	.030
Sdp29plann	**.630**	-.089	-.118	-.096	.260	-.073
Sdp39pol	-.049	**.772**	-.123	.089	-.018	.024
Sdp27pol	-.033	**.731**	.144	-.044	-.007	-.028
Sdp21pol	-.098	**.726**	.097	-.028	-.107	-.087
Sdp30pol	.009	**.725**	.057	-.009	.154	-.007
Sdp6pol	.048	**.488**	.050	.059	.012	-.104
Sdp24enf	.087	.000	**.787**	-.061	.004	.067
Sdp26enf	-.029	.094	**.734**	.027	.061	.031
Sdp22enf	.083	.046	**.729**	-.001	-.002	-.072
Sdp14enf	.092	-.070	**.729**	-.035	-.042	-.038
Sdp18enf	-.174	.049	**.425**	.092	.068	-.015
Sdp12comm	.202	.165	-.072	**.737**	-.053	-.053
Sdp1comm	.117	.039	.033	**.718**	-.050	.070
Sdp8comm	.135	-.169	-.096	**.654**	.129	-.046
Sdp35comm	-.252	.063	.160	**.520**	-.009	.006
Sdp16inc	-.071	-.048	.101	-.030	**.739**	.086
Sdp13inc	-.086	-.224	-.055	.104	**.667**	-.107
Sdp19inc	.051	.156	.055	-.006	**.638**	-.011
Sdp31inc	.059	.231	-.007	-.065	**.595**	.042
Sdp5inc	-.236	-.099	-.022	.028	**.537**	-.102
Sdp28cult	.222	-.057	.043	-.043	-.004	**-.739**
Sdp7cult	-.028	.025	-.030	-.002	-.110	**-.721**
Sdp20cult	.341	.065	-.059	-.080	-.013	**-.651**
Sdp32cult	.107	.157	-.049	.107	.094	**-.520**
Sdp25cult	-.143	.130	.117	-.037	.088	**-.583**
Sdp10cult	-.282	-.043	.049	.102	.075	**-.423**

Rotation Method: Oblimin with Kaiser Normalization.
Rotation converged in 7 iterations.

Table I2 - Principal components analysis, rotated factor matrix (operational managers)

Analysis of the reliability of the components using Cronbach's α found that all the variables exceed .6 which is suggested by Hair et al. (2010) to be acceptable for exploratory research. See Table I3. Four of the variables exceed .7, generally considered to show acceptable reliability by Hair et al. (2010).

Variable	**Current study**	**Bailey, Johnson and Daniels (2000)**
Command	.610	.80
Planning	.889	.89
Enforced	.723	.80
Culture	.716	.71
Incremental	.699	.63
Political	.779	.78

Table I3 -Cronbach's α - SDP dimensions - operational managers

Senior operational managers

The 39 items of the scale were subjected to PCA using SPSS version 19. Prior to performing PCA the suitability of the data for factor analysis was assessed. The Kaiser-Meyer-Olkin value was .83 which

exceeds the recommended value of .6 (Kaiser, 1970). Bartlett's test of Sphericity (Bartlett, 1954) was statistically significant (p<.001) supporting the factorability of the correlation matrix.

Five items of the original scale were found to cross-load onto more than one component, or to load much lower than the other items of the component. These are shown in Table I4. Consideration of these items concluded that their removal would not damage the theoretical comprehensiveness of the construct. Following discussion with subject matter experts at the Police Staff College the researcher concluded that these items were less significant in the context of policing organisations for his level of manager and the six items were removed from the analysis.

Code	Item	Reasons for removal
Sdp4cult	The attitudes, behaviours, rituals and stories of this organisation reflect the direction we wish to take it in	Item had low loading on component 1 compared to other items
Sdp12comm	The strategy we follow is directed by a vision of the future associated with the chief constable (or other senior officer)	Cross-loaded on components 1 and 4
Sdp19inc	To keep in line with our environment we make continual small changes to strategy	Cross loading on components 2 and 5
Sdp27pol	The information on which our strategy is developed often reflects the interests of certain groups	Cross-loaded on components 4 and 5
Sdp38inc	We tend to develop strategy by experimenting and trying new approaches	Cross-loading on components 1 and 5

Table I4 - Items removed from SDP scale - senior operational managers

A PCA using oblique rotation (Oblimin) extracted eight components with eigenvalues greater than 1, which collectively explained 59.2% of the variance. The researcher concluded that a more parsimonious solution was desirable as some of the components were formed by the loading of only one or two scale items. Catrell's scree test (Figure I1) suggested that a five component solution may describe the data.

A simple solution was found extracting 5 components which respectively explained 48.6% of the variance. The resulting components explained 19.2%, 11.8%, 7.1%, 5.8% and 4.7% of the variance respectively. The result is shown in Table G6.

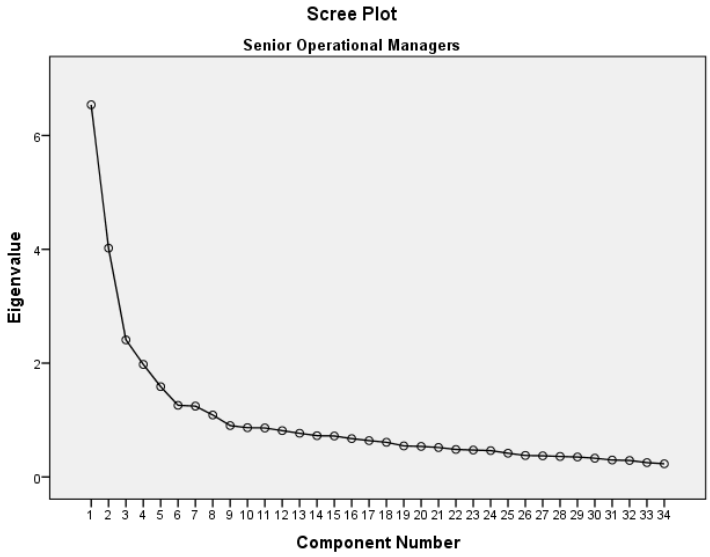


Figure G1 – Catrell's scree test showing possibility of a five factor solution

Analysis of the correlation between components found a small-medium strength (Cohen 1988) correlation between Components 1 and 4 (r=-.242), again justifying the use of oblique rotation in the EFA.

	Components				
	1	2	3	4	5
Sdp11plann	**.777**	-.070	.180	.072	.031
Sdp23plann	**.727**	.067	-.001	-.144	-.028
Sdp15plann	**.722**	.119	.026	.040	-.040
Sdp17plann	**.692**	.098	-.136	-.025	-.053
Sdp37lann	**.676**	-.002	-.141	-.141	.117
Sdp36plann	**.663**	.026	-.041	-.132	.124
Sdp2plann	**.662**	.080	-.044	-.026	-.118
Sdp29plann	**.647**	.063	-.075	-.286	.106
Sdp1comm	**.476**	-.048	.020	.302	.140
Sdp8comm	**.448**	-.059	.036	.091	.003
Sdp26enf	-.014	**.766**	.032	.109	.004
Sdp24enf	-.019	**.761**	-.190	.027	.053
Sdp22enf	.009	**.716**	-.039	.049	.151
Sdp14enf	.142	**.696**	.143	-.154	-.101
Sdp18enf	.050	**.529**	.040	.103	-.172
Sdp25cult	-.081	.010	**.775**	.165	-.150
Sdp28cult	.159	-.079	**.708**	-.106	-.048
Sdp7cult	.114	.074	**.652**	-.079	.033
Sdp32cult	-.117	-.110	**.595**	.291	.107
Sdp20cult	.265	.059	**.466**	-.179	.086
Sdp10cult	-.217	.062	**.403**	.119	.153
Sdp33comm	.102	-.033	.097	**.751**	-.092
Sdp35comm	.005	.053	.027	**.668**	-.089
Sdp21pol	-.114	.140	.044	**.660**	.198
Sdp30pol	-.131	.092	.025	**.601**	.294
Sdp39pol	-.114	.060	-.071	**.583**	.322
Sdp13inc	-.026	.129	.139	**-.506**	.347
Sdp3enf	.019	.225	.060	**.501**	-.149
Sdp34enf	-.139	.281	.237	**.482**	.042
Sdp9pol	-.013	-.085	.017	-.040	**.688**
Sdp5inc	.153	-.020	.050	-.382	**.527**
Sdp6pol	-.322	.208	.151	.161	**.499**
Sdp31inc	.134	-.063	.024	.160	**.497**
Sdp16inc	.292	.177	.006	-.207	**.489**

Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 7 iterations.

Table I5 - Principal components analysis, rotated factor matrix – senior operational managers

A summary of the five dimensions of Strategy development profile found through this study are described in Table I6 which includes the Cronbach's α indicators of reliability of the new scales.

Dimension	**Description**	**Cronbach's a**
Structured Rationality	This combines the elements of Planning recognised by Bailey et al. (2000) but includes aspects of the chief constable playing a central and active role in the development of strategy.	.860
Power-play	This comprises the ways that power is used by individuals or groups inside or outside the force to influence the adoption and success of strategies in the interest of that group.	.801
Imposed	This is very similar to the Enforced choice of Bailey et al.(2000) and comprises the aspects of central and local governance which the police have to work within.	.741
Culture	This is the same as the dimension described by Bailey et al. (2000) and comprises ideas about how organisational culture influence the choice of strategy.	.689
Partnership	This comprises the ideas about strategy developing incrementally and includes the ways that different objectives and requirements are balanced.	.555

Table I6 - Strategy development profile dimension from current study

Four of the dimensions have a Cronbach's α over .6 which Hair suggests is acceptable for exploratory research. The *partnership* dimension has a Cronbach's α of .555 which questions the reliability of that dimension. However, this dimension is only formed of five items and Briggs and Cheek (1986) suggest that for scales with few items, the mean inter-item correlation is a more helpful test of reliability. In this case the mean inter-item correlation for the *partnership* dimension is .2045 which falls between the recommended range of .2 and .4 suggested by the authors as showing acceptable reliability.

Appendix J PLS-SEM analysis. Preparation of data

Tables J1 and J2 show the indicators removed from the analysis following the guidelines of Hair et al. (2014). as a result of this review with details of the reason for removal and potential impact on the analysis.

Code	Item	Loading	Reason for removal and impact on analysis
Sdp10cult -	There is resistance to any strategic change which does not sit well with our culture.	.361	There are signs that this level of manager found difficulty in answering the questions on culture. The focus of it in interviews suggested that it was a stronger force than suggested in the survey. It is possible that the idea of 'resisting' strategic change is not easy for a junior manager to be open about in a disciplined organisation.
Sdp25cult -	The strategies we follow develop from 'the way we do things round here'.	.292	The problem with this item suggests that operational managers predominantly see strategy as passed down to them to implement rather than discussed.
Sdp22enf -	We have strategy imposed on us by those external to this organisation, for example the government.	.564	Other aspects of strategy being set outside the organisation are still covered in the scale. The difficulty with this item may relate to this layer of manager seeing the influence of government through statute. As discussed in chapters 5 and 6, this becomes an accepted part of the working rather than something 'imposed'.
Sdp31inc -	We keep early commitment to strategy tentative and subject to review.	.447	This removes the ideas of being 'tentative' from this dimension for operational managers. This possibly sits uneasily with this more junior level of middle manager exhorted to positive and purposeful leadership.
Sdp35comm	Our chief constable tends to impose strategic decisions (rather than consulting the top management team).	.874	Although the external loading is large on the latent indicator Command, the other three indicators had negative and very low external loadings suggesting that sdp35comm did not fit with the remaining indicators. This was supported by the Composite Reliability score for Command being .0446. The EFA described in section 5.5 and appendix I shows that sdp35comm loaded only weakly (.520) onto this latent variable. The removal of this item confines the variable to formal ideas about the chief constables role.

Table J1 – indicators removed from the PLS SEM analysis for operational managers

Code	Indicator	loading	Reason for removal and impact on analysis
Sdp1comm	A senior officer's vision is our strategy	.320	These two items were grouped with planning following the EFA to form the variable structured rationality. The removal of them means that aspects of command are not represented in the SDP. This is discussed in chapter 7.
Sdp8comm	The chief constable determines our strategic direction	.393	
Sdp6pol	Our strategy is a compromise which accommodates the conflicting needs of powerful groups and individuals	.038	These two items represent the extreme end of power-play – an aspect which came out clearly in the interviews but which managers possibly felt constrained to answer in a survey. The idea of an individual or group openly blocking a strategy does not sit easily in a disciplined organisation.
Sdp30pol	Our strategies often have to be changed because certain groups block their implementation	.260	
Sdp7cult	There is a way of doing things in this force which has developed over the years	-.110	The removal of these three items means that ideas of how the culture develops and the importance of history are not taken account of in the dimension. This conflicted with ideas from the interviews and the difficulty with them may be due to the significant changes and challenges which police managers are seeing at the moment.
Sdp20cult	Our organisation's history directs our search for solutions to strategic issues	-.337	
Sdp28cult	Our strategy is based on past experience	.471	
Sdp13inc	Our strategies emerge gradually as we respond to the need for change	.375	Ideas about strategy developing over time are still included in the partnership dimension. It is possible that the word 'gradually' is difficult in organisations which often need to achieve results in the tenure of a parliament, PCC or chief constable.

Table J2 – indicators removed from the PLS SEM analysis. Senior operational managers

Appendix K Results of Fornell-Larcker tests – Operational managers

(Square root of AVE shown on the diagonal)

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1.	**Championing alternatives**	.8429											
2.	**Facilitating adaptability**	.7314	.7475										
3.	**Performance**	.0675	.0624	Single item									
4.	**Composite performance**	-.0088	-.0602	.2579	Form. Var.								
5.	**Influence**	.3137	.2588	.1259	.0675	Single-item							
6.	**Command**	.0704	.0660	.1583	-.0166	.0800	.7181						
7.	**Planning**	.1336	.1685	.3418	.1410	.2985	.3123	.7549					
8.	**Enforced choice**	-.0581	-.1087	-.0524	-.0707	-.2527	.0166	-.1200	.6847				
9.	**Culture**	.1057	.1010	.0989	.0490	.1126	.1833	.2323	.0241	.7037			
10.	**Incremental**	.1457	.1898	.1690	.1011	.2486	.1988	.4561	.0202	.2917	.7068		
11.	**Political**	-.0060	.0228	-.2041	-.1091	-.2019	.0082	-.2910	.3770	.1809	-.0661	.7428	
12.	**E/stakeholder salience**	.1614	.1353	.1689	.0779	.2733	.1334	.2501	-.1450	.2150	.1589	-.0653	Form. Var.

Table K1 – Correlation between constructs. Operational managers

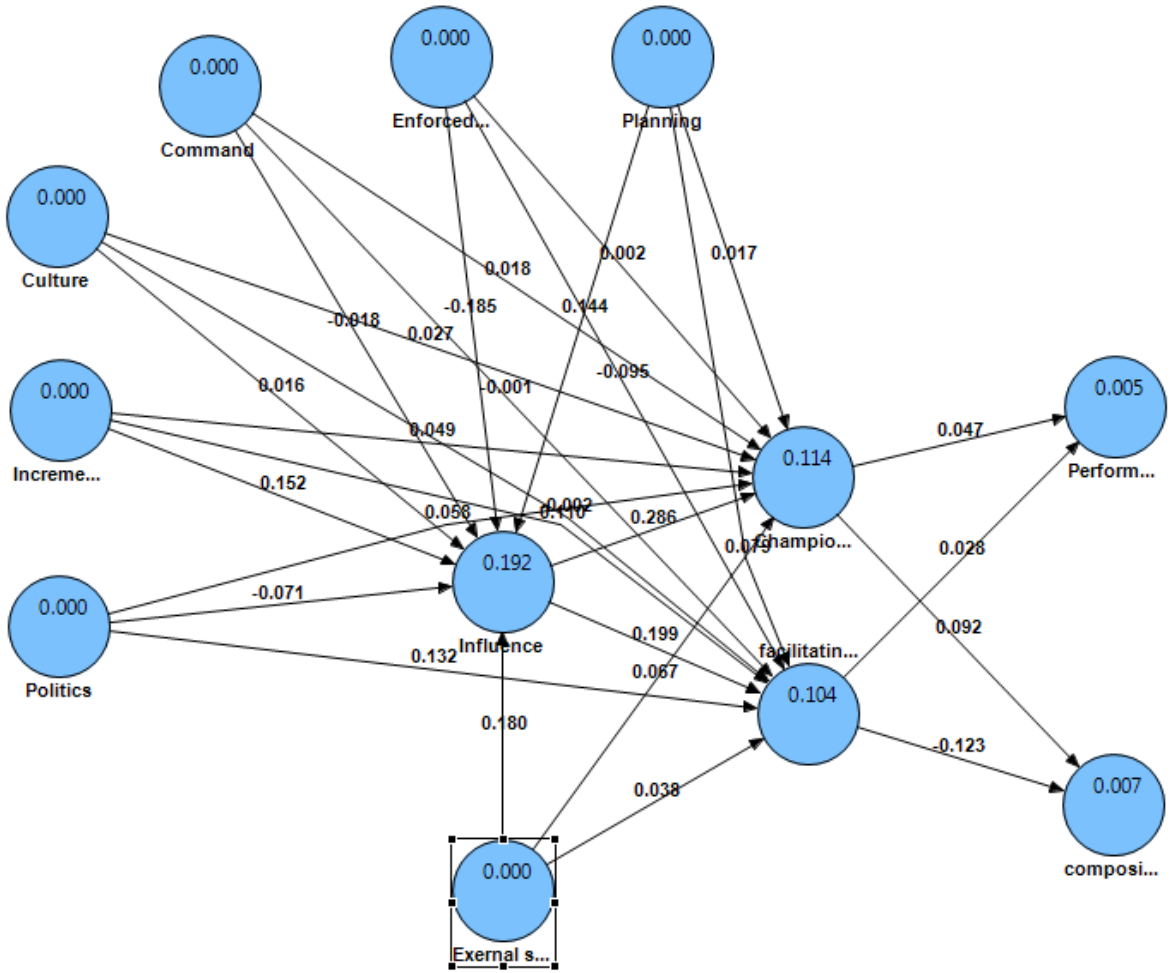
Appendix K Results of Fornell-Larcker tests – Senior operational managers

(Square root of AVE shown on the diagonal)

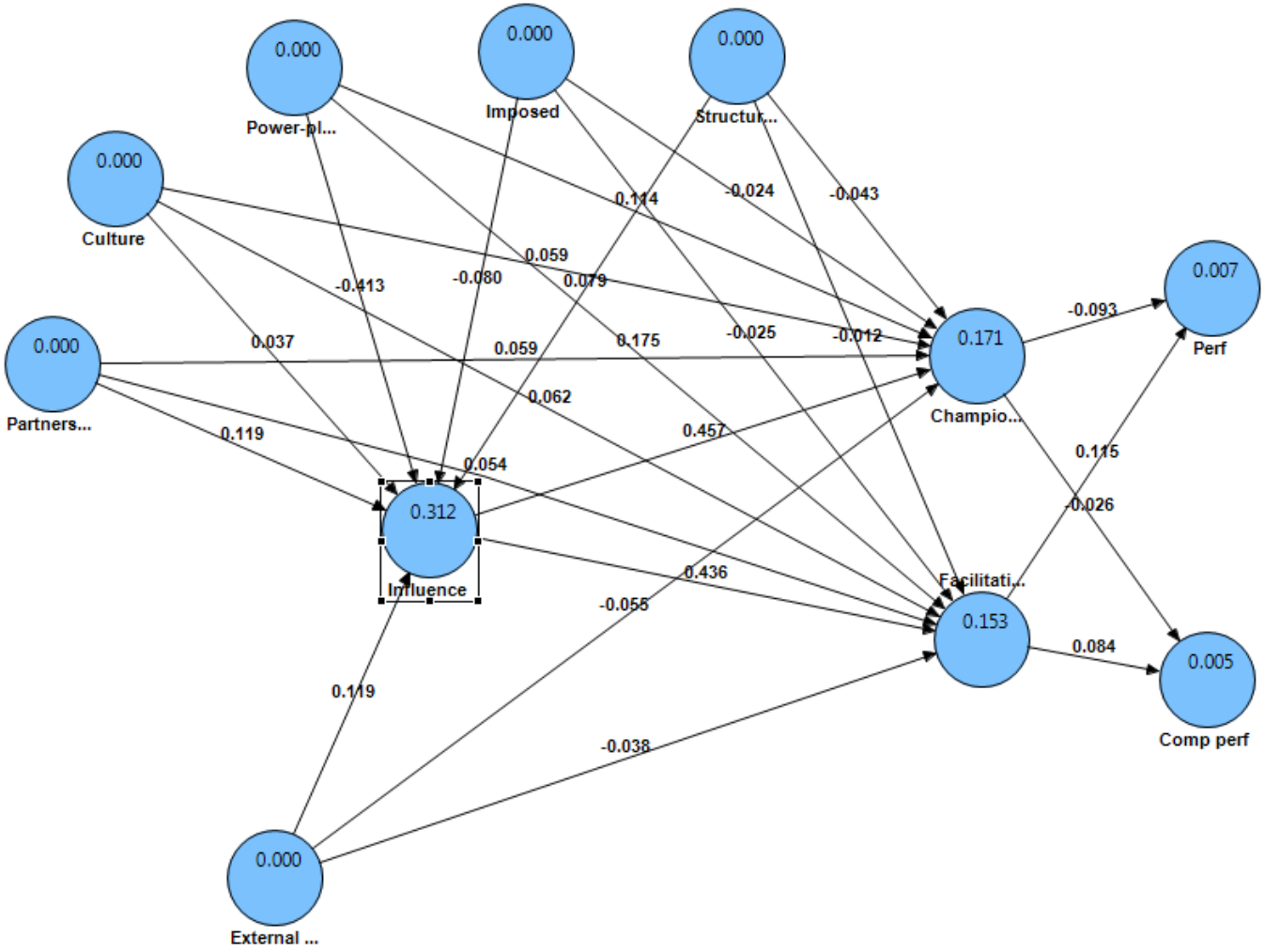
		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1.	**Championing alternatives**	.8315										
2.	**Facilitating adaptability**	.7011	.7750									
3.	**Performance**	-.0125	.0480	Single item								
4.	**Composite performance**	.0151	-.0101	-.1681	Form. Var.							
5.	**Influence**	.3801	.3398	.3055	-.0911	Single-item						
6.	**Structured rationality**	.0257	.0275	.3030	-.1151	.2802	.7381					
7.	**Partnership**	.1243	.1136	.1911	-.0509	.2542	.3331	.7523				
8.	**Power-play**	=.0825	-.0240	-.2331	-.0101	-.5122	-3748	-.2125	.7087			
9.	**Cultural**	.0377	.0636	-.1672	-.0416	-.1770	-.2844	-.0014	.4535	.7660		
10.	**Imposed**	-.0735	-0487	-.0986	.1688	-.2319	.0633	.0459	.3395	.1013	.6931	
11.	**Ext. stakeh. salience**	.0592	.0578	.1251	-.1102	.2969	.2128	.2093	-.2844	.0343	-.2202	Form. Var.

Table K2 – Correlation between constructs and AVE. Senior operational managers

Appendix L Results of PLS-SEM – Operational managers



Appendix L Results of PLS-SEM – Senior operational managers



Appendix M Ethical Approval

1. [X] I confirm that any related documents (including, as appropriate, copies of any questionnaires, interview schedules etc, and/or a copy of the information sheet and completed consent forms from each participant) are attached and submitted with this report.

2. I confirm that the primary data:

[ ] will be destroyed on confirmation of award

or

[X] has been retained by the researcher for potential use in publication relating directly to this research and that explicit consent to do this has been obtained from each participant

or

[ ] is submitted with this report for secure storage (where this has been required by the University of Reading Ethics Committee) and that any other copies have been destroyed

3. [X] I confirm that the research has been conducted in accordance with the ethics requirements of the University of Reading.

Signed (student):

Date: 1st April 2016

Print name: Garry Elliott Student number: