Open Access implies that scientific publications are made freely accessible on the web. The author or originator keeps the copyright to the publication, but gives the users permission to read, download, copy, distribute, print out, search or link to the full text without a claim for compensation.

Reference to this paper in APA (6th):

This is the final text version of the article, it may contain minor differences from the publisher’s pdf version.
Organisational Climate and Investigation Performance in the Norwegian Police: A Qualitative Study

Jon Anders Lone\textsuperscript{a}, Alexander Garnås\textsuperscript{a}, Trond Myklebust\textsuperscript{b}, Roald Bjørklund\textsuperscript{a}, Thomas Hoff\textsuperscript{a}, and Cato Bjørkli\textsuperscript{a}

\textsuperscript{a} Department of Psychology, University of Oslo, Oslo, Norway

\textsuperscript{b} Department of Research, Norwegian Police University College, Norway

Correspondence concerning this article should be addressed to: Trond Myklebust, Department of Research, Norwegian Police University College, P.O. Box 5027, 0301 Oslo, Norway.
Email: trond.myklebust@phs.no

Published:

The present study aimed to identify organizational climate dimensions that are salient for police investigation performance, and to explicate the mechanisms of the relationship between organizational climate and investigation performance. We conducted thirty-eight semi-structured interviews with participants at three job levels of police investigative work (Chiefs of Police, \( n = 11 \), Senior Investigating Officers, \( n = 14 \), Detectives, \( n = 13 \)) in eleven Norwegian police districts. We analysed the interview data by using a model of organizational climate based on the Competing Values Framework (Quinn & Rohrbaugh, 1983). Two types of climate, Human Relations climate and Rational Goal climate, were perceived to enhance investigation performance. The findings indicate that a Human Relations climate enhances investigation performance by developing collective human capital, and by supporting internal and external cooperation and coordination of resources. Moreover, the findings suggest that a Rational Goal climate increases investigation performance by encouraging planning, goal-setting, and task focus.

Keywords: organizational climate; police investigation; performance, Competing Values Framework
Introduction

Police investigation is a central part of law enforcement and is considered as a vital part of the criminal justice system. Criminal investigation is defined as the process of answering questions as to if, how, where, when, why, and by whom a crime was committed (Fahsing, 2013; Oxburgh, Myklebust, & Grant, 2010). Investigations are often organized into two main parts; preliminary investigation conducted by uniformed police, and follow-up investigation performed by trained personnel (detectives or investigators) having investigative work as their main responsibility (Stelfox & Pease, 2005).

Police investigation performance is critical as it underpins both the process of prosecution and court rulings of criminal cases, and ultimately affects public perceptions of the police and the overall criminal justice system (Tong, Bryant, & Horvath, 2009). Investigation performance is a complex, multidimensional concept that could be broadly defined as success in the investigation process comprising the following five activities: Develop an understanding of the law enforcement problem (problem understanding), develop alternative strategies for problem solving through investigation (alternative investigation approaches), prioritize and plan investigative actions for detectives (investigation decision), carry out the investigation by interviews, surveillance, technical evidence, etc. (investigation implementation), and evaluate investigation process and result to change direction and complete case investigation (criminal case investigation evaluation). Put differently, high investigation performance is achieved if the police investigation unit carries out these activities efficiently and with high quality (Gottschalk, 2007). The activities in the investigation process imply that investigators need to acquire, transmit and apply knowledge effectively, and police investigations could therefore be considered as knowledge work (Ericsson, Charness, Hoffman, & Feltovich, 2006; Hald, 2011; 2013).
Existing studies have indicated that organizational factors such as culture, leadership, knowledge management, and use of information and communication technology (ICT) are related to investigation performance (Ask, Granhag, & Rebelius, 2011; Fahsing & Ask, 2013; Gottschalk, 2007). However, existing research has generally neglected to study the relationship between organizational climate and investigation performance. We argue there are two main reasons to explore the implications of organizational climate for investigation performance: First, research shows that organizational climate is related to individual and unit-level performance across a broad range of organizations and work domains, including the police (Armeli, Eisenberger, Fasolo, & Lynch, 1998; Kuenzi & Schminke, 2009; Shane, 2010; Schneider, Ehrhart, & Macey, 2013). Second, studies of police work suggest that organizational climate is associated with psychological states and attitudes such as wellbeing, job satisfaction, commitment, and work engagement (Davey, Obst, & Sheehan, 2001; Hart & Cotton, 2003; Kuo, 2015; Nalla, Rydberg, & Meško, 2011; Nima, Moradi, Archer, Garcia, & Andersson Arntén, 2014), which are generally linked to work performance (Christian, Garza, & Slaughter, 2011; Cropanzano & Wright, 2001; Judge, Thoresen, Bono, & Patton, 2001; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

Consequently, the purpose of the present study was twofold: To a) identify organizational climate dimensions that might have implications for police investigation performance, and b) to explore the relationship between organizational climate and investigation performance. In the following we describe dominant theories of organizational climate, and review existing studies of organizational climate and culture in police work.

Organizational Climate: Theory and Measurement

Organizational climate has recently received considerable attention in the organizational research literature. Climate research focuses on polices, practices and procedures, whereas
studies of organizational culture, a related, but distinct concept, are mainly concerned with values, beliefs, and assumptions (Schneider et al., 2013). Studies show that organizational climate is linked to individual attitudes (satisfaction, commitment, and turnover intentions), behaviors (absenteeism, Organizational Citizenship Behaviors), and job performance, as well as specific and broad unit-level outcomes (service, safety, innovation, performance, effectiveness) (Carr et al., 2003; James et al., 2008; Kuenzi & Schminke, 2009; Schneider et al., 2013). Within the organizational climate literature, a central discussion has focused on the distinction between global climate and focused climate approaches. Global climate is defined as the shared perceptions regarding the policies, practices, and procedures that an organisation expects, supports, and rewards (Schneider & Reichers, 1983; Schneider, Erhart & Macey, 2011; Kuenzi and Schminke, 2009), while focused climates are related to a specific strategic focus, such as climates for service (Schneider, White, & Paul, 1998), safety (Zohar & Luria, 2005), and innovation (Anderson & West, 1998). Focused climates are considered the best predictors for specific strategic outcomes such as safety and innovation, whereas global climate is assumed to be a better predictor of broad outcomes such as work-unit performance (Kuenzi, 2008). Global climate also seems to work as a foundation on which focused climates are built (Kuenzi & Schminke, 2009; Schneider et al., 2013). Hence, researchers interested in specific outcomes should use focused climate, and scholars interested in global outcomes should study global climate (Kuenzi & Schminke, 2009).

Recent studies suggest that global climate could be conceptualized and measured through the Competing Values Framework (Kuenzi, 2008; Patterson et al., 2005). The Competing Values Framework (CVF) was originally developed by Quinn and colleagues (Quinn & Rohrbaugh, 1983) as a framework of organizational effectiveness, organized along two fundamental dimensions – flexibility versus control and internal versus external orientation. Thus, the CVF consists of four quadrants, representing different climate types:
The human relations approach (flexibility and internal focus) emphasizes the cohesion and morale of employees within an organisation as means, and human resource development as an end. The open systems model (flexibility and external focus) emphasizes flexibility and readiness as means, and growth, resource acquisition, and external support as ends. The internal process approach (control and internal focus) emphasizes information management and communication as means, and stability and control as ends. Finally, the rational goal approach (control, external focus) emphasizes planning and goal setting as means, and productivity and efficiency as ends (Quinn and Rohrbaugh, 1983).

Patterson and colleagues (2005) used the CVF as a theoretical basis to develop a measure of global climate – the Organizational Climate Measure (OCM). The OCM comprises 17 climate dimensions distributed across the four CVF quadrants (see Table X for dimensions and definitions). Several studies indicate that that the OCM is a reliable and valid measure of organizational climate in different organizational settings (Bernstrøm, Lone, Bjørkli, Ulleberg, & Hoff, 2013; Ancarani et al., 2011; Patterson et al., 2005), and that it includes climate dimensions perceived as relevant in knowledge work settings (Hannevik, Lone, Bjørklund, Bjørkli, & Hoff, 2014; Lone et al., 2014). In the present study we examine the relationship between organizational climate and investigation performance; a global outcome. Consequently, we use a global approach and conceptualize climate through the Organizational Climate Measure based on the Competing Values Framework.

**Organizational Culture and Climate in Police Work**

Police research has historically focused on police occupational culture rather than organizational culture and organizational climate, and the idea that there is a distinct and universal police culture is central (Loftus, 2010; Paoline, 2003; Terpstra & Schaap, 2013). Police culture could be defined as “[..] reduced, selective, and task-based version of culture” shaped by the occupation (Bailey, 1995). More specifically, the police culture is understood
as a result of the demands and pressures of police work, and includes core characteristics such as a sense of mission, suspiciousness, internal solidarity, cynicism and pessimism, and pragmatism (Loftus, 2010). Research has suggested that police culture is a useful concept for understanding aspects of police work such as learning the job, use of time, interaction with different groups, and working style (Loftus, 2010; Terpstra & Schaap, 2013).

There are few studies of the relationship between police culture and investigation performance, but Gottschalk and colleagues (Dean et al., 2008; Glomseth, Gottschalk, & Solli-Saether, 2007; Gottschalk, 2007) recently examined a broad range of potential predictors in a series of studies. The results indicated that a democratic and team-oriented culture, decision leadership, knowledge sharing and use of information systems were positively associated with increased investigation performance. However, the studies also have several limitations; the response rate was estimated to be approximately 20 %, the sample included only Senior Investigating Officers and no Detectives, and the independent and dependent variables were rated by the same participants in the same survey, making the studies prone to common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In addition to the research by Gottschalk and colleagues, a small number of studies indicate that aspects such as pressure and team culture could affect decision-making processes in criminal investigations, and therefore might have implications for investigation performance (Ask et al., 2011; Fahsing & Ask, 2013).

There have also been some studies of organizational climate in police research. First, several studies show that a supportive organizational climate (e.g., appraisal and recognition, role clarity, goal congruency, supportive leadership, decision-making, professional growth and interaction) is one of the most important predictors of work stress and well-being in police work (Davey et al., 2001; Hart & Cotton, 2003; Hassell & Brandl, 2009). Second, studies have suggested that dimensions of the organizational climate (e.g. development
opportunities) are related to job satisfaction, commitment, and work engagement (Davey et al., 2001; Hart & Cotton, 2003; Kuo, 2015; Nalla et al., 2011; Nima et al., 2014), generally shown to be linked to work performance (Christian et al., 2011; Cropanzano & Wright, 2001; Judge et al., 2001; Meyer et al., 2002). Third, a small number of studies in other types of police work than investigations indicate that dimensions of organizational climate (e.g., support, co-worker relations, and leadership) are related to work performance through mechanisms such as social exchange and work stress (Armeli et al., 1998; Shane, 2010).

Taken together, existing theory and research suggest that organizational climate could be related to and have implications for police investigation performance. However, there are at least three serious limitations of these studies. First, they lack a clear common theoretical foundation of organizational climate, and conceptualize and measure organizational climate in different ways. Second, the studies only include a few climate dimensions, although recent research highlights the importance of exploring the effects of multiple climate dimensions or climate types simultaneously (Schneider et al., 2013; Schulte, Ostroff, Shmulyian, & Kinicki, 2009). As such, we lack a broader understanding of the effects of climate on performance in this setting. Third, and most important, there are to our knowledge no studies of the relationship between organizational climate and performance in police investigations. Although there have been similar studies in other types of police work, the generalizability of the results is uncertain, as recent research suggests that different job positions in the police have different tasks, responsibilities, and work environments (Nima et al., 2014).

The Present Study

In the present study we apply a qualitative theory-elaboration approach (Lee, Mitchell, & Sablynski, 1999) to examine the relationship between organizational climate and police investigation performance. Specifically, we use the Organizational Climate Measure (Patterson et al., 2005), based on the Competing Values Framework (Quinn & Rohrbaugh,
1983) as our theoretical foundation. By taking this approach, we provide two important contributions: a) We identify and describe the organizational climate dimensions perceived as salient in the context of police investigative work, and b) we identify potential mechanisms in the organizational climate - performance relationship.

Method

Context and Participants

Our sampling strategy in the present study was purposive (Pratt, 2009). The data were collected from police investigation units in the Norwegian police as part of a large research project of investigative police work in Norway.

The Norwegian police service is divided into 27 police districts. The police districts are in turn subordinated the National Police Directorate and the Ministry of Justice and Public Security. The integration of the prosecuting authority is an important feature of the organisation of criminal investigation in Norway. The prosecuting authority is involved from the outset of an investigation and the close cooperation between the police prosecutor and the Senior Investigating Officer is considered a premise of efficient investigation. The police prosecutor has the overriding responsibility for the progress and quality of an investigation, while the Senior Investigating Officer is responsible for carrying out the actual investigation.

In the present study we used data from 11 of the 27 police districts. The data from these districts was collected after the 22nd of July terrorist attack in 2011, and in the same time period. The districts represented the variation in Norwegian police districts concerning size, population, geography, and organisation. We contacted the Chief of Police in each of the 11 included districts with an presentation of our study and purpose in order to recruit participants to be appointed based on the criteria of having active investigative experience in their respective roles in investigation management or as Detectives. In the Norwegian police, the
Chief of Police is in charge of the investigations conducted in their respective police districts, and therefore the Chief of Police also participated as interview subjects. The sampling procedure resulted in 38 participants from the three levels of investigative units in each district; The Chief of Police/Chief Constable \( (n =11) \), the investigation management level (Senior Investigating Officer, Major Crime Manager/Head of Crime Operations, \( n=14 \)), and Detectives (investigators) \( (n =13) \). Each Chief of Police selected participants from the investigation management level and the investigating Detectives level in their districts. In the largest district in the sample we included 7 participants to cover the diversity of the different units, and in one other district we included 2 participants at the investigation management level. Existing studies suggest that managers and employees perceive the organisational climate differently (Patterson, Warr, & West, 2004). Hence, by including participants at three levels in each district we incorporated diverse perspectives on the organisational climate and its relationship to investigation performance.

The participants gave their informed consent to take part in the study and were informed about the possibility to withdraw at any time. The participants were made anonymous in the analyses. The research project was approved by the Norwegian Social Sciences Data Services (NSD), the Data Protection Official for research for all Norwegian universities.

**Interviews**

We used semi-structured interviews. The interviews were conducted according to the PEACE model (College of Policing, 2016; Walsh & Oxburgh, 2008). The interviewers were focusing on open-ended questions and conducting the interviews in a non-directing way to encourage participants to elaborate on their free narratives as response to the interview guide. The questions were based on a modified SWOT approach (Strengths, Weaknesses,
Opportunities, and Threats) which provides a certain structure to the participants’ reflections along two dimensions (positive–negative and past–future) without specifying particular types of answers. More specifically, we used the SWOT approach to encourage reflections on the strengths, weaknesses, opportunities and threats related to the core activities in the investigation process. As such, it provided in-depth accounts of important determinants of investigation performance and their underlying mechanisms as well as judgements on investigation performance in the police district. Our approach was based on the rationale that experienced practitioners themselves are best qualified to make judgement on what good police work constitutes (see e.g. Holgersson & Knutsson, 2012; Knutsson, 2017). All interviews included the following four questions:

Please tell us what you think works well regarding the investigative work here in the police district - we call this the strengths of the investigative work.

Please tell us what you think does not work well regarding the investigative work here in the police district – we call this the weaknesses of the investigative work.

Please tell us what you consider to be opportunities for improving the investigative work here in the police district – we call this the opportunities in the investigative work.

Please tell us what you consider to be threats against improving the investigative work here in the police district - we call this the threats in the investigative work.

Additional information was obtained by encouraging the participants to respond to follow-up probes such as: “You have mentioned some strengths, are there additional strengths?” “Could you illustrate this by giving an example?”

All interviews were conducted by the third author who is an experienced interviewer and has formerly worked with police investigations as an investigating Detective. The interviews were conducted between August 2012 and November 2012. The interviews were
recorded digitally, and the length of the interviews ranged between 35 minutes and 2 hour and 9 minutes, with a mean length of 1 hour and 6 minutes. The interviews were transcribed verbatim by seven master students in work and organizational psychology. We assessed the quality of the transcriptions by comparing independent transcriptions of three randomly chosen interviews, and by controlling the transcriptions against the audio files. No relevant differences were found between the independent transcriptions, or between the transcriptions and the audio files.

Analysis

The purpose of the present study was twofold: To identify organizational climate dimensions perceived as salient to investigation performance in the police districts, and to elucidate potential mechanisms of the relationship between organizational climate and performance. To achieve these goals we conducted two different analyses:

To begin with, we performed a deductive content analysis using the Organizational Climate Measure (Patterson et al., 2005) to identify the generic climate dimensions perceived as most relevant to investigation performance. Next, we conducted an inductive thematic analysis to uncover how the generic climate dimensions manifested themselves within the context of police investigative work. For example, integration is defined in the OCM as “the extent of interdepartmental trust and cooperation.” This could potentially refer to cooperation between the prosecuting authority and the investigators, cooperation between units in the police district, or cooperation with other police districts. These forms of cooperation have different functions, and are likely to have disparate implications for investigation performance. Therefore, based on the generic climate dimensions we developed inductively driven codes and themes representing context-specific climate dimensions. Finally, we developed a tentative model explicating how the context-specific climate dimensions were perceived to affect investigation performance. The deductive content analysis consisted of
three steps, whereas the inductive thematic analysis consisted of five steps (see Figure 1). In the following, we describe the analyses in more detail.

The deductive content analysis was based on the process described by Neuendorf (2002). First, we identified 5749 interview statements using the following definition:

A statement is a part of a sentence, a whole sentence, or several sentences expressed by the interviewee, that constitute a coherent, meaningful point of view [that describe an aspect of police investigative work]

Second, the statements were coded by the second author on the 17 dimensions of the Organizational Climate Measure (OCM). We used the descriptions of the CVF quadrants as well as the definitions for the climate dimensions provided by Patterson and colleagues (2005) to guide the coding (see Table 1). We assessed the inter-rater reliability for the coding of five randomly chosen interviews on the 17 OCM dimensions. The average Cohen’s kappa across all these dimensions (see fig.1) was .51, with values ranging from .42 to .59 between the interviews. The results indicated fair to good agreement beyond chance (Banerjee, Capozzoli, McSweeney, & Sinha, 1999).

Third, we identified the generic climate dimensions experienced as the most relevant to investigation performance. The findings revealed that integration, training, and efficiency were the most prominent climate dimensions, as they collectively covered almost 50% of the statements about organizational climate (2095 of 4467 statements). The average Cohen’s kappa values for integration, training, and efficiency were .59, .69, and .51, respectively, suggesting fair to good agreement beyond chance (Banerjee et al., 1999). The three climate dimensions were also the only dimensions discussed by all participants. Consequently, we focused on these dimensions in the subsequent analysis.
Next, we conducted an inductive thematic analysis of the statements coded on the three generic climate dimensions. The analysis was conducted by the first and second author, and followed the broad phases described by Braun and Clarke (2006). We used the analysis software package QSR NVivo 10.0 for Windows to support the analyses.

First, we familiarized ourselves with the data by reading all the interviews statements within each climate dimension. Second, we developed first-order categories for each climate dimension by systematically identifying central features of the data. We worked separately, and then met to discuss the categories, resulting in 19 first-order categories (see Figure 2 for an overview of the development from OCM dimensions to first-order categories and themes).

Third, we developed a coding scheme for the first-order categories. Prior to the coding we merged several interview statements to obtain more comprehensive descriptions of the organizational climate, reducing the number of statements from 2095 to 1196. Next, we coded the interview statements on the first-order categories. Each interview statement could be coded on several categories. We assessed the inter-rater reliability on the coding of the 19 first-order categories in eight randomly chosen interviews. The results showed a value of Cohen’s kappa across the categories of .64. Fourteen categories obtained values above .60, and three categories had values above .50, indicating fair to good agreement beyond chance (Banerjee et al., 1999). Two categories, “quality” and “learning from experience”, had values below .40, covered only a few statements, and were excluded from the subsequent analyses.

Fourth, we developed themes by combining the 17 remaining first-order categories. Our final list consisted of six inductive themes, each representing a context-specific organizational climate dimension: 1) Human resources planning and development, 2) internal cooperation and coordination, 3) external cooperation and coordination, 4) use of information and communication technology (ICT), 5) investigation management, and 6) emphasis on
investigation (see descriptions of climate dimensions and representative quotes in Table 2).

We assessed inter-rater reliability for the climate dimensions through three steps: In the first step, the original coding of the first and second author (internal coders) on the first-order categories was recoded to the final six organizational climate dimensions, yielding a Cohen’s Kappa between the internal coders of .72. In the second step, two trained external coders independently coded 120 interview statements on the six climate dimensions. The 120 statements were randomly chosen by the first and second author and represented all the climate dimensions. The inter-rater reliability between the two external coders yielded a Cohen’s kappa of .61. In the third step, the two external coders discussed their coding and reached a consensus in cases of disagreement which was compared to our original coding, yielding a Cohen’s kappa of .67, indicating fair to good agreement beyond chance (Banerjee et al., 1999) (see Table 3).

Finally, we developed a tentative model of how the six context-specific organizational climate dimensions were perceived to affect investigation performance. We refined the model through several iterations, and used existing theory and research related to the Competing Values Framework (Cameron & Quinn, 2011; Quinn & Rohrbaugh, 1983) to shed light on the perceived relationships between the climate dimensions, mechanisms, and investigation performance. The tentative model is depicted in Figure 3 in the Findings section.
Findings

The purpose of the present study was to identify climate dimensions perceived as salient to investigation performance in the police districts, and to elucidate potential mechanisms of the relationship between organizational climate and performance. In our analyses we identified six salient context-specific climate dimensions, and used the Competing Values Framework (CVF) to organize them into two climate types: Human Relations climate and Rational Goal climate (see Figure 3). The dimension called use of information and communication technology (ICT) was distributed on the Human Relations and Rational Goal climates, as it included organizational practices belonging to both climate types. Based on our findings and existing research we argue that the two climate types enhance investigation performance in the police districts by increasing collective human capital and certain types of behaviors. In the following we describe each organizational climate type, and explain the hypothesized relationships between organizational climate, collective human capital and behaviors, and in turn investigation performance.

< Insert Figure 3 about here >

Human Relations Climate

In the Competing Values Framework, the Human Relations climate is characterised by an internal focus and flexibility in relation to the environment. The Human Relations climate emphasizes developing human resources by building a cohesive and collaborative community of employees (Cameron & Quinn, 2011; Quinn & Rohrbaugh, 1983). In the police investigative work setting, Human Relations climate included three dimensions: HRM planning and development, internal cooperation and coordination, and external cooperation and coordination.

First, the participants experienced that the dimension Human Resources planning and
development affected investigation performance through its effects on collective human capital (knowledge, skills, and abilities) in the police districts. The participants were generally quite satisfied with the opportunities for training and development, and many districts had practices for knowledge sharing across investigators, groups and units. On the other hand, the participants observed that recent technological development and social changes increased the complexity of police investigations, and enhanced the demands for specialised knowledge, skills, and abilities (KSAs) within fields such as sexual offences, investigative interviews of children, forensics, and information and communication technology. Several participants noted that increased specialization and development of specialist KSAs was needed, with potential implications for the traditional generalist role in the Norwegian police:

The society today is a lot more complicated than only fifteen years ago. There are other demands [in investigation] than before, so we probably need more specialization than we have been willing to accept so far. We will have to consider whether the generalist model is still sustainable within investigation.

Our data showed that a majority of the police districts, in particular the smaller districts, experienced great difficulties attracting, developing and retaining investigators with specialist KSAs. Yet, only a few districts systematically assessed their human capital needs and developed detailed development plans, as expressed by one participant:

“One of our weaknesses is that we do not have an adequate system for planning of training and development, but we are getting better at it.”

The participants maintained that inadequate human resource planning combined with considerable competition for specialists between the police districts resulted in a shortage of specialists in many districts. In turn, the shortage and high turnover of specialists was perceived to diminish the capacity for investigating complex cases, reduce the continuity of investigative work, and lead to low return on investment in development. To solve these problems, many participants argued that the districts should establish centralised specialist
units with district-wide responsibilities. According to the participants, the specialist units would increase the opportunities to attract, develop, and retain specialists, and thus enhance the collective human capital in the districts. A growing number of districts had successfully implemented these types of units, often achieving some of the proposed benefits.

Second, the participants perceived internal cooperation between units within the districts as a salient climate dimension affecting investigation performance. They described that the units within the police districts were designed to be independent units with responsibility for cases in their designated geographic area. The units focused mainly on achieving their own goals, at times at the expense of helping other units and emphasizing the overall goals of the police district. As a result, a majority of the participants often experienced the cooperation between units as inadequate and ineffective, despite examples of successful, informally organized, and often short-term cooperation. Related to this, the participants noted that the police district lacked central coordination of the resources across the units. Several participants argued that the districts should establish centrally located and specialised investigation units with responsibility for complicated cases in the district, and some of the large districts had succeeded with this. One participant summarised the lacking emphasis on cooperation and coordination in the district:

> It is demanding to develop holistic thinking in the police district. There are four units where most of the investigation activity takes place, and we lack functional units taking responsibility for the district as a whole.

Third, the participants highlighted that the climate dimension external cooperation was central to investigation performance through its effects on inter-district cooperation and coordination of resources. Several participants referred to “Project Borderless,” a collaborative project between four police districts aiming to reduce property crime committed by mobile criminal groups as a good example of efficient cooperation across police districts:
It is a crucial and important strength of our district that we are involved in Project Borderless. The project is still running and we are prioritizing our participation in the project.

Yet, several participants argued that most police districts should put more emphasis on cooperation with their neighbouring districts in order to handle new types of crime. Similar organisation of work and a common understanding of the investigation process were described as two important conditions for successful inter-district cooperation. Furthermore, the cooperation with special agencies of the police and other external actors were considered important for investigation performance in large, complicated cases. The cooperation with the special agencies was generally characterised as good, although the lacking capacity of certain external agencies at times delayed the investigation process. Quite a few participants described use of information and communication (ICT) as a central characteristic of internal and external cooperation, and observed how these systems were used for information sharing between units, districts, and between districts and special agencies:

Another issue related to investigation is intelligence. Currently, some officers are very good at using intelligence systems like Indicia as an information base; other officers are not doing this at all. Obviously, using these types of systems and being proactive is crucial in order to succeed with crime fighting.

Taken together, the Human Relations climate in the districts was experienced to increase investigation performance in the police districts through its effects on human capital and on two types of behaviors. Specifically, a strong Human Relations climate was perceived to enhance: a) the collective human capital (knowledge, skills, and abilities) within the districts, b) cooperation and coordination of resources between units within the police districts, and c) cooperation and coordination of resources between police districts and between districts and special agencies.

**Rational Goal Climate**
In the Competing Values Framework, the Rational Goal climate is characterised by an external focus and tight control within the organisation. The Rational Goal climate emphasizes productivity and efficiency through the means of planning and goal-setting (Cameron & Quinn, 2011; Quinn & Rohrbaugh, 1983). In the setting of police investigative work, Rational Goal climate was experienced to comprise two organizational climate dimensions: Investigation management and emphasis on investigation.

First, several participants described the importance of investigation management. Successful investigation management was perceived to enhance investigation efficiency and quality through its effects on planning and goal-setting behaviors. Specifically, distribution, planning, and prioritizing of cases were described as important practices. The experiences of investigation management varied considerably between districts, in some districts experienced as well-organized, and in other districts described as “weak” or “lacking.” In several districts, investigation management was attended to in a close collaborative relationship with the prosecuting authorities, sometimes referred to as the core of investigation management. In other districts, Senior Investigating Officers and investigators fulfilled these functions, with only sporadic cooperation with and late involvement of the prosecuting authorities. The prioritizing of cases was identified as another central topic, and a large number of participants observed that “tougher prioritizing” by the management was strongly needed to increase investigation efficiency. Additionally, the participants described that the districts had rather different ways of organizing the distribution and planning of cases. Certain districts had established centralised distribution teams which immediately took care of simple cases, and planned, prioritised, and distributed the more complicated cases. This was described as a highly effective practice, and several participants noted that they either planned to or wanted to introduce similar practices in their districts:
Our main strength is that we have a distribution office where we sit together with the prosecuting authorities. This is the heart of the investigation. We sit together and make decisions about whether we have the capacity to investigate the case, what we should do with the case. We also distribute the cases and develop orders for the investigators.

Several participants noted that particular information and communication (ICT) systems could support planning and goal-setting activities in investigation management by providing an overview of the status of cases. However, the use of these systems varied substantially between the police districts and the participants regularly described an unfulfilled potential:

We are not using the ICT tools or making use of the opportunities they offer in the management of investigative work, despite that they are there. We are not using them sufficiently in investigations.

Second, the other dimension of the Rational Goal climate was emphasis on investigation in the police district. Several participants described competition for resources between investigative police work and uniformed police work. Our findings showed that investigative police work was generally given less priority, and considered to have a lower status. Investigative police officers were frequently used as a reserve supply for the uniformed police in cases of absenteeism, given extra tasks unrelated to investigative work, and certain police districts used integrated shift lists, in which investigators worked every third or fourth weekend. Furthermore, the participants experienced that increased emphasis on emergency preparedness after the 22nd of July terrorist attacks had exacerbated the situation. According to the participants, there were numerous negative consequences of a lacking emphasis on investigative work in the districts: Late initiation of investigation, diminished task focus, continuity, and progress, and in turn reduced quality and efficiency:

There is a never-ending battle for resources here, and we are constantly fighting against having to hand over our people to uniformed police work in the weekends.
The immediate investigation practice was another frequently mentioned feature of the emphasis on investigation climate dimension. Immediate investigation referred to the cooperation between the uniformed police and the investigative police officers in the investigation process. When successfully engaging in this practice, the uniformed police officers instantly initiated the investigation process at the crime scene, gathered information and conducted investigative interviews, finished simple and straight-forward cases, and transferred complicated cases to the investigative police officers. A majority of the participants characterised the practice as vital to investigation performance, and experienced that it more often than not was functioning rather well in their district. Immediate investigation was perceived to increase the efficiency in the simple cases, enable the investigators to focus on the more complicated cases, and generally enhance the emphasis on investigative work among the uniformed police officers:

The immediate investigation is very beneficial for us. [...] The cooperation between the investigators and the uniformed police is good; the uniformed police understand what we are doing, and that they also are part of the investigative work.

Taken together, the Rational Goal climate in the districts was experienced to influence investigation performance in the police districts through its effects on two types of behaviors. Specifically, a strong Rational Goal climate was perceived to increase: a) planning and goal-setting, and b) task focus within the police district, thereby enhancing investigation performance.

**Discussion**

The purpose of the present study was to identify organizational climate dimensions that might have implications for police investigation performance, and to explore the relationship between organizational climate and investigation performance. We used a qualitative theory-elaboration approach, and analysed interview data through the
Organizational Climate Measure, based on the Competing Values Framework. The present study makes two important contributions to the literature. First, we identify and describe two climate types perceived as salient to investigation performance in the police districts; Human Relations climate and Rational Goal Climate. Our findings suggest that a Human Relations climate in this setting is characterised by an emphasis on systematic development of human resources, centralised cooperation and coordination of resources within the district, and on external cooperation and coordination with other police districts, specialty agencies, and governmental agencies through collaborative projects. The findings also indicate that a Rational Goal Climate in this setting is characterised by an emphasis on active investigation management distributing, planning and prioritising cases, and through an emphasis on investigative work rather than focusing exclusively on uniformed police work. Second, based on our findings and extant theory, we have developed a tentative model explicating potential mechanisms in the relationship between Human Relations and Rational Goal climates and investigation performance. Put briefly, we hypothesize that a Human Relations climate enhances investigation in the police districts through the development of collective human capital and by stimulating internal and external cooperation and coordination. Furthermore, we hypothesize that a Rational Goal Climate increases investigation performance in the police districts by stimulating planning, goal-setting, and task focus behaviors. In the following, we compare our findings to existing studies, and discuss the main contributions of the study.

**Contribution and Comparisons with Existing Research**

Our findings are aligned with findings focusing on the issues raised by detectives such as specialization, internal support, management, the declining detective status (Stelfox, 2011; Wood & Tong, 2009; Carson, 2007). This strengthen the argument that our finding might be generalizable to other Western police organizations (Chatterton, 2008; Neyroud & Disley,
2007; Shane, 2010; Smith & Flanagan, 2000; Stelfox, 2007; Westera, Kebbell, Milne & Green 2016a; 2016b). As an example, Armeli and colleagues (1998) found in their study of operational police work in US, a positive relationship between Perceived Organizational Support (POS) and work performance (driving under influence arrests and speeding citations) for patrol officers with strong socio-emotional needs. Perceived Organizational Support, the extent to which the employees perceive that their employer values their contributions and cares about their well-being, is very similar to a Human Relations climate, emphasising the well-being and development of employees. Moreover, our findings are in line with research across different types of police work suggesting that an organizational climate characterized by Human Relations dimensions (e.g., development opportunities and supportive leadership) is positively associated with outcomes such as job satisfaction, commitment, well-being, and work engagement (Davey et al., 2001; Hart & Cotton, 2002; Kuo, 2015; Nalla et al., 2011; Nima et al., 2014). Although these outcomes generally are important predictors of work performance (Christian et al., 2011; Cropanzano & Wright, 2001; Judge et al., 2001; Meyer et al., 2002), the present study is the first to specifically examine the relationship between organizational climate and investigation performance. In addition, our findings also extend recent studies in other work settings indicating that organizational climates characterised by cooperation (Collins & Smith, 2006), and concern for employees (Chuang & Liao, 2010) are positively related to organizational performance.

Previous studies of organizational climate in police work have typically included dimensions that could be categorized as Human Relations climate. This is probably because police research primarily has studied organizational predictors of negative outcomes such as work stress and burnout, and only more recently has started to investigate antecedents of performance (Hart & Cotton, 2003). Although there is limited research on the relationship between Rational Goal climate and performance in police work settings, studies from other
work settings provide some support for our results. For example, one recent study in a diverse sample of organizations showed that Rational Goal climate was positively related to global departmental performance (Kuenzi, 2008), and a longitudinal study in the manufacturing sector indicated that Rational Goal climate dimensions (effort, feedback, quality) were positively related to firm productivity (Patterson et al., 2004). Taken together, the present study extends existing studies by indicating that a Rational Goal climate could have important implications for investigation performance, and by identifying and describing two salient dimensions of Rational Goal climate for investigation performance; investigation management and emphasis on investigation.

The second main contribution of the present study is that we have identified potential mechanisms that could increase our understanding of the relationship between organizational climate and investigation performance. Previous studies have suggested that organizational climate could affect work performance in police settings through social exchange processes (Armeli et al., 1998), and possibly also through its linkage to outcomes such as stress, well-being, job satisfaction, commitment, and work engagement (Davey et al., 2001; Hart & Cotton, 2003; Nalla et al., 2011; Nima et al., 2014; Shane, 2010). However, these studies have primarily inferred or suggested mechanisms based on theory, and less often tested the mechanisms empirically. Thus, the present study adds to existing research by identifying and describing mechanisms that could explain how Human Relations and Rational Goal climates enhance investigation performance. Specifically, we hypothesize that a Human Relations climate emphasising HRM planning and development enhances collective human capital, and that collective human capital increases investigation performance. Moreover, we propose that Human Relations climate stimulates cooperation and coordination of resources both between units within the district, and between police districts, and thereby increase investigation performance. Interestingly, recent studies within the HRM research literature (see e.g. Jiang et
have revealed similar mechanisms between HRM systems, organizational climate, and performance in other work settings. A comprehensive study by Collins and Smith (2006) in knowledge-intensive technology companies showed that commitment-based human resource practices were positively related to a social climate characterized by trust, cooperation, and shared codes and language. In turn, social climate was positively related to knowledge exchange and combination, which predicted firm financial performance (revenue from new products and services and sales growth). However, Collins and Smith (2006) did not examine other possible mechanisms, and recommended that future research should investigate factors such as human capital. Consequently, our findings are both supported by and extend studies in other knowledge work settings.

Finally, the present study also suggests that a Rational Goal climate increases behaviors such as planning, goal-setting, as well as task focus on investigation, and that these behaviors are associated with enhanced investigation performance. This is an important finding that contributes both to police research and to the broader organizational climate literature, as the underlying mechanisms in the relationship between Rational Goal climate and performance rarely have been studied empirically. Although there are no studies that could be directly compared to the present study, our findings are in line with the Competing Values Framework, which predicts that an organisation characterized by a Rational Goal climate emphasizes productivity and efficiency, and attempts to achieve productivity and efficiency through practices and procedures that support and reward planning, goal-setting, and task focus (Cameron & Quinn, 2011; Quinn & Rohrbaugh, 1983).

Limitations

There are at least three limitations of this study. First, as the Chief Constables selected the Senior Investigating Officers and Detectives (investigators) in their respective districts, the sample might not be representative of the police organisation as a whole. However, our
purpose was to explore the breadth of climate perceptions within the Norwegian police organisation. In this type of purposive sampling strategy the emphasis is on identifying participants that are “reflective, willing and able” to give a detailed account of the phenomena of interest (Morse, 2007, p. 231). We argue that the Chief Constables were in a good position to identify participants in their district that were involved in and possessed expert knowledge about police investigative work, and motivated to share their reflections.

Second, the perceived salience of the climate dimensions, as well as their hypothesized relationships to investigation performance, could be an expression of conditions particular to the Norwegian context. For example, the integration of the prosecuting authority in the investigative processes is a distinctive feature of the Norwegian police. Furthermore, the organisation of work in Scandinavian countries is generally characterised by high autonomy, opportunities for development, and representative systems in which the employees can influence work conditions (Gallie, 2007). This calls into question whether our findings can be generalized to other countries.

Third, due to its research design, the present study cannot be used to draw conclusions about causality. The study was cross-sectional and only provides a snap-shot of the phenomena of interest. Moreover, the tentative model proposed in this study is based on the participants’ perceptions. Although existing theory and studies provide support for our model, the relationships and mechanisms presented above must be empirically investigated in future studies using research designs suitable for testing hypotheses.

**Conclusion and Future Research**

The present study provides the first empirical investigation of the relationship between organizational climate and police investigation performance. As such, the study increases our understanding of an organizational phenomenon that could have important implications for investigation performance, and generates research questions that should be further examined.
Specifically, we propose that future research studies investigate four issues:

First, our thorough description of the characteristics of Human Relations and Rational Goal climates in this setting could be used to develop a reliable and valid measure of organizational climate for police investigative work. Second, by using this measure, the hypothesised relationships between the two climates, the suggested mediating mechanisms, and investigation performance could be tested empirically in the Norwegian police as well as in other national settings. The study by Collins and Smith (2006) serves as an example of a suitable research design for this purpose. The researchers collected data for the independent, mediating, and dependent variables from different sources (human resource managers, core employees, and CEOs), and measured organizational performance one year later. Third, recent studies have indicated that Human Relations and Rational Goal climates are highly related to each other (Kuenzi, 2008; Patterson et al., 2005), that different climates interact with each other, and that the configuration of multiple climates matters for performance outcomes (Schulte et al., 2009). Thus, the relationship between the two climates and investigation performance should be investigated simultaneously, in order to elucidate possible additive and interactive effects on performance. Finally, studies of the antecedents of the Human Relations and Rational Goal climates in this setting are needed to provide insight into how these climates are formed, and whether and how they could be changed. Recent studies have generally indicated that managerial emphasis and leader behavior are important antecedents for organizational climate (Kuenzi and Schminke, 2009), and more specifically that a high-commitment/high-performance human resource management system is an important antecedent for Human Relations climate (Aryee, Walumbwa, Seidu, & Otaye, 2012; Chuang & Liao, 2010; Collins & Smith, 2006; Takeuchi, Chen, & Lepak, 2009).
References


### Tables

#### Table 1

*Dimensions of the Organizational Climate Measure (OCM): Quadrant in the Competing Values Framework (CVF), Name, and Description*

<table>
<thead>
<tr>
<th>CVF</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR</td>
<td>Autonomy</td>
<td>Designing jobs in ways which give employees wide scope to enact work</td>
</tr>
<tr>
<td></td>
<td>Integration</td>
<td>The extent of interdepartmental trust and cooperation</td>
</tr>
<tr>
<td></td>
<td>Involvement</td>
<td>Employees have considerable influence over decision-making and - the free</td>
</tr>
<tr>
<td></td>
<td>Supervisory support</td>
<td>The extent to which employees experience support and understanding from their immediate supervisor</td>
</tr>
<tr>
<td></td>
<td>Training</td>
<td>A concern with developing employee skills</td>
</tr>
<tr>
<td></td>
<td>Welfare</td>
<td>The extent to which the organisation values and cares for employees</td>
</tr>
<tr>
<td>IP</td>
<td>Formalization</td>
<td>A concern with formal rules and procedures</td>
</tr>
<tr>
<td></td>
<td>Tradition</td>
<td>The extent to which established ways of doing things are valued</td>
</tr>
<tr>
<td>OS</td>
<td>Innovation &amp;</td>
<td>The extent of encouragement and support for new ideas and innovative</td>
</tr>
<tr>
<td></td>
<td>Flexibility</td>
<td>approaches; and - an orientation toward change</td>
</tr>
<tr>
<td></td>
<td>Outward Focus</td>
<td>The extent to which the organisation is responsive to the needs of the customer and the marketplace in general</td>
</tr>
<tr>
<td></td>
<td>Reflexivity</td>
<td>A concern with reviewing and reflecting upon objectives, strategies, and work processes, in order to adapt to the wider environment</td>
</tr>
<tr>
<td>RG</td>
<td>Clarity of</td>
<td>A concern with clearly defining the goals of the organisation</td>
</tr>
<tr>
<td></td>
<td>Organizational Goals</td>
<td>The degree of importance placed on employee efficiency and productivity at work</td>
</tr>
<tr>
<td></td>
<td>Efficiency</td>
<td>How hard people in organizations work towards achieving goals</td>
</tr>
<tr>
<td></td>
<td>Effort</td>
<td>The measurement and feedback of job performance</td>
</tr>
<tr>
<td></td>
<td>Performance Feedback</td>
<td>The extent of pressure for employees to meet targets</td>
</tr>
<tr>
<td></td>
<td>Pressure to Produce</td>
<td>The emphasis given to quality procedures</td>
</tr>
</tbody>
</table>

Table 2

Context-Specific Organizational Climate Dimensions: Quadrant in the Competing Values Framework (CVF), Number of Participants, Description, and Representative Quotes

<table>
<thead>
<tr>
<th>CVF quadrant</th>
<th>Climate Dimension</th>
<th>Participants (statements)</th>
<th>Description</th>
<th>Representative quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR</td>
<td>Human resources planning and development</td>
<td>38 (455)</td>
<td>Emphasis on planning and developing human resources in the police district, including specialist knowledge, skills, and abilities (KSAs).</td>
<td>“Criminal investigations have become very specialised and require specialised knowledge, so training and development is an important issue.”</td>
</tr>
<tr>
<td>HR</td>
<td>Internal cooperation and coordination</td>
<td>35 (193)</td>
<td>Emphasis on cooperation and coordination of resources between units in the police district, and the extent of centralised coordination of resources.</td>
<td>“We are one district, but the way I see it, we are organized in different ways in the two cities, and it is not very easy to cooperate.”</td>
</tr>
<tr>
<td>HR</td>
<td>External cooperation and coordination</td>
<td>26 (87)</td>
<td>Emphasis on cooperation and coordination with other police districts, specialty agencies, and other governmental agencies.</td>
<td>“We participate in the Project Borderless [a collaborative project between several police districts], and this is a priority for us. The project is very important, and beneficial for the district. We will continue to take part in the project.”</td>
</tr>
<tr>
<td>HR/RG</td>
<td>Use of information and communication technology (ICT)</td>
<td>26 (67)</td>
<td>Emphasis on using information and communication technology (e.g. information systems) in the investigation process.</td>
<td>“We have an intelligence system called Indicia, which is an excellent tool that we eventually have started using. We are using it as much as we can.”</td>
</tr>
<tr>
<td>RG</td>
<td>Investigation management</td>
<td>38 (346)</td>
<td>The emphasis on efficient planning and coordination of cases, and the extent of cooperation with the prosecuting authorities.</td>
<td>“And this is one of the main strengths of the investigative work here; the proximity of the prosecuting authorities, and that we are working in close collaboration.”</td>
</tr>
<tr>
<td>RG</td>
<td>Emphasis on investigation</td>
<td>35 (161)</td>
<td>Emphasis on investigation in the police district, and the extent of cooperation and coordination with uniformed/preventive police units.</td>
<td>“We have two models: The simple cases are investigated immediately and finished [by the preventive police], while the more complicated cases are initiated [by the preventive police], and then sent to the investigator for further investigation.”</td>
</tr>
</tbody>
</table>
### Table 3
*Inter-Rater Reliability of Six Context-Specific Organizational Climate Dimensions*

<table>
<thead>
<tr>
<th>Climate Dimension</th>
<th>Internal coders (^a)</th>
<th>95% CI</th>
<th>External coders (^b)</th>
<th>95% CI</th>
<th>Internal and external coders (^b)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>All dimensions</td>
<td>0.72 [0.66, 0.77]</td>
<td>0.61 [0.53, 0.69]</td>
<td>0.67 [0.59, 0.75]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM planning and development</td>
<td>0.79 [0.71, 0.86]</td>
<td>0.71 [0.57, 0.82]</td>
<td>0.73 [0.58, 0.83]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal cooperation</td>
<td>0.69 [0.52, 0.82]</td>
<td>0.58 [0.40, 0.73]</td>
<td>0.58 [0.38, 0.75]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External cooperation</td>
<td>0.79 [0.62, 0.90]</td>
<td>0.57 [0.31, 0.79]</td>
<td>0.84 [0.55, 0.96]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of ICT</td>
<td>0.92 [0.76, 0.98]</td>
<td>0.86 [0.59, 0.96]</td>
<td>0.72 [0.43, 0.90]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigation management</td>
<td>0.72 [0.62, 0.80]</td>
<td>0.80 [0.66, 0.89]</td>
<td>0.82 [0.68, 0.91]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasis on investigation</td>
<td>0.84 [0.71, 0.92]</td>
<td>0.54 [0.27, 0.78]</td>
<td>0.77 [0.54, 0.91]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Confidence intervals are based on 10,000 bootstraps. \(K_C\) = Cohen’s Kappa statistic. CI = Bias corrected and accelerated (BCa) confidence interval. \(^a\)n statements = 257. \(^b\)n statements = 120.
Figures

Figure 1. Flowchart and Summary of the Two Analyses

Deductive content analysis
1. Identifying interview statements (5749)
2. Coding statements on dimensions in Organisational Climate Measure (OCM). Assessing inter-rater reliability.
3. Selecting most important generic organisational climate dimensions: Integration, training, efficiency.

Inductive thematic analysis
1. Reading and discussing data.
2. Developing first-order categories (19).
5. Developing a tentative model of the relationship between organisational climate and investigation performance.
Figure 2. Organizational Climate Measure (OCM) Dimensions, First-order Categories, and Themes (Context-Specific Organizational Climate Dimensions)
Figure 3. A Tentative Model of Organizational Climate, Mechanisms, and Investigation Performance in the Norwegian Police