

Measuring Police Climate

*The development and evaluation of an instrument
measuring police organizational climate*

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Abstract

The following study developed and evaluated a new instrument for measuring police climate. The instrument was based on the Competing Values Framework (Quinn & Rohrbaugh, 1983), and measured global climate, external and internal integration, and individual readiness to organizational change. A sample of 188 police members from the 27 police districts in Norway completed the questionnaire. The data from the questionnaires was analyzed with exploratory factor analysis, assessment of internal reliability, and investigation of the inter-correlations between the construct measures. The results indicated preliminary support for the instrument, as a simple factorial solution consistent with theoretical assumptions was obtained, and acceptable internal reliability was found for all but one scale. However, there were some statistical and theoretical challenges with the instrument, as is expected in a scale developed phase. Specifically, global climate as measured through the Competing Values Framework had significant high inter-correlations, and indicated that the police climate types all coexist and work together. Interestingly, the results supported two police specific adjustments to the content and structure of the integrations scale. Overall the results indicate that the instrument is still in a development phase and future studies are needed to confirm and validate the instrument. Implications and future research are discussed.

Keywords: Organizational climate, integration, police, competing values framework

The environment in which the police operates is constantly changing, and at an increasingly higher pace (NOU 2013:09, 2013; Yilmaz, 2013). New types of crime, open borders and more transnational crime (POD, 2014), technological innovations and changing public expectations towards a more service oriented police is just some of the challenges that the police organizations face (NOU 2013:09, 2013; Yilmaz, 2013). These environmental changes pose substantial challenges to the police organizations, as they must adapt and try to find new methods of fighting and preventing crime. To overcome these challenges, different police reforms and models have been developed and implemented. Internationally, the police organizations are undergoing several large scale change processes (COMPOSITE, 2014). However, despite these change efforts there has been much debate over the effectiveness and rationale behind these change initiatives (Yilmaz, 2013).

According to Yilmaz (2013), a new approach to police reform is needed. This approach must take into consideration both the environmental conditions surrounding the organization, as well as the internal factors of the organization itself. An important and necessary qualification is therefore that each change initiative is “tailored” after the specific organization in question (Yilmaz, 2013). Thus, an important first step is therefore to analyze the organization, in order to understand the structural, as well as the environmental factors that go into play, and affect the policing strategies and practices (Yilmaz, 2013, p. 909). The police must develop an understanding of its current internal weaknesses and how to change them into future strengths (van den Born et al., 2013, p. 814). The central argument is that one needs to know the starting point before change is initiated. As Yilmaz (2013, p. 909) purposes, organizational culture could be one such key factor for identifying the structure and internal properties of an organization.

These global trends in the police environment further challenges the police nationally (POD, 2014). Specifically in Norway, the police are under substantial pressure, and the question of police reform is highly relevant. Questions about the police efficiency and structure have been part a long-lasting public debate, and recently there have been calls for changes in the internal structures and culture of the Norwegian police (DIFI, 2013; NOU 2012:14, 2012; NOU 2013:09, 2013). In the aftermath of the tragic terror attack in Norway the 22 of July 2011, the Norwegian police received massive critique for how the organization handled the crisis. Several evaluation committees were appointed (DIFI, 2013; NOU 2012:14, 2012; NOU 2013:09, 2013), and they concluded that many of the problems could be attributed to internal factors of the police, particularly; poor leadership, organizational culture, and coordination within the police organization (NOU 2012:14, 2012; NOU 2013:09, 2013).

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The Norwegian police are now facing a large organizational change, and a new police reform has been proposed (“Nærpolitireformen”) (Prop. 61 LS (2014–2015), 2015). In short, this reform proposes to reduce today’s 27 police districts to 12 regional districts, as well as changing some of the responsibilities of the police towards a stronger emphasis on “core tasks”. This makes the question of a “tailoring model” (Yilmaz, 2013) for change highly relevant. Nevertheless, to the author’s knowledge no specific instrument for measuring police culture currently exists within the field of organizational psychology.

Given this context, this study aims to develop an instrument measuring police culture in the Norwegian Police Service. This tool will be “tailored” specifically for the police organization, with attention to the impending change, and the salient features of the police organization. An important emphasis will be placed on the balance between the practical needs for a useful organizational tool for the police on the one hand, and a psychometrical sound, theoretically based instrument, on the other. Because the interest here is on the practical applications of the instrument, climate will be measured as this represents a more behaviorally oriented, surface manifestation of culture. This will be discussed more in detail in the next section. Before looking at the development of the climate instrument, relevant theoretical and empirical foundation for this instrument will be accounted for. More specifically a review of the research literature on climate, current discussions in the climate literature, and methodological consideration for climate will be presented.

Organizational climate

In recent years, the study of how employees are influenced by their organizational context has been given increased attention in research (Kuenzi & Schminke, 2009). As a conceptual framework for understanding the way people experience and act in their work settings, organizational climate has gained popularity (Katz & Kahn, 1978; Schneider, Ehrhart, & Macey, 2013). However, there are many different definitions, and conceptualizations of what constitutes organizational climate. Consequently, the question of how to define climate has been a long-standing debate within the climate literature (Thumin & Thumin, 2011), and several different conceptualizations have been developed. For instance, Verbeke, Volgering, and Hessels (1998) found 32 different definitions of organizational climate in the literature. Therefore, in order to clarify how organizational climate is understood, and defined in the present study, the earlier developments of organizational climate, and current conceptualizations will be presented.

An associated issue is what organizational climate is not, i.e. associated constructs that also explain the social processes in organizations. An example of a related, yet distinct

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construct is organizational culture. The concepts of organizational climate and culture are often used interchangeably, but nonetheless represent two distinct constructs (Schein, 2010; Schneider et al., 2013). Thus, in order to develop a measure of police climate it is important to be clear about the construct being measured, including what it is not (Clark & Watson, 1995). The next section will present these issues, then a review of the climate literature will follow.

Organizational climate and culture

As noted above, it is useful to take a brief detour to explain the difference between climate and culture. Organizational climate and organizational culture are two distinct, yet overlapping concepts for describing the way people experience and describe their work setting (Katz & Kahn, 1978; Schein, 2010; Schneider & Barbera, 2014; Schneider et al., 2013). Among climate researchers, there is still much debate over the difference, or possible links between the two concepts (Denison, 1996; Thumin & Thumin, 2011). Several studies have also identified a confusion in the way the concepts of organizational climate and culture are used (Schneider, 1990; Schneider, Ehrhart, & Macey, 2011). Arguably, one way to understand these concepts is by understanding what they are not (Schwartz & Davis, 1981).

Schein (2010) described organizational climate as a manifestation of culture, where observed organizational behavior is seen as a product of the underlying culture. Thus, climate is the shared individual psychological perceptions of the work setting (James et al., 2008), often described in terms of the meaning attached to the organizations policies, practices, and procedure (Schneider & Reichers, 1983). Organizational culture, in comparison, is defined as "... a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration" (Schein, 2010, p. 18). Thus, culture exists at a higher level of abstraction than climate, where climate reflect more surface-level manifestations culture (Kuenzi & Schminke, 2009; Schein, 2010; Schneider, 1990). Therefore, climate is seen as more behaviorally oriented, and related to "how we do things around here" (Schneider, Macey, & Young, 2006, p. 117), whereas culture explains why this occurs based on the core values and fundamental assumptions of the organization (Schein, 2010). As such, climate is more appropriate for survey measurement, and when focus is on the observable manifestations of culture (Denison, Nieminen, & Kotrba, 2014). For a comprehensive discussion on climate and culture, see Schneider and Barbera (2014) or Denison (1996).

Conceptualizing and defining climate

The early developments of climate research was characterized by disagreement about the definition and conceptualizations of the concept (Schneider et al., 2011). Conceptual discussions pertained to whether climate was an individual or organizational level construct

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(Ostroff & Schulte, 2014), what dimensions constitutes climate (James et al., 2008), and problems with the level measurement of organizational climate (James & Jones, 1974; Schneider et al., 2013) compared to psychological climate (Chan, 1998; James et al., 2008; Kozlowski & Klein, 2000). However, according Schneider et al. (2011) these conceptual concerns have now largely been resolved, and today there is a growing consensus on the definition and conceptualization of organizational climate (Ostroff & Schulte, 2014). Nevertheless, some of these problems persist today, and are reflected in the current discussions in the climate literature (e.g see Parker et al., 2003). For a discussion of the earlier developments in climate research, see James et al. (2008); or Schneider et al. (2013).

Organizational climate in this study is defined as “the shared perceptions of and the meaning attached to the policies, practices, and procedures employees experience and the behaviors they observe getting rewarded and that are supported and expected” (Glick, 1985; Kuenzi & Schminke, 2009; Schneider et al., 2013; Schneider & Reichers, 1983). That is, organizational climate is a framework for understanding the social context of organizations; how employees collectively perceive, behave, and derive meaning from the organizational context (James & Jones, 1974; Schneider, 1975). A fundamental assumption underlying organizational climate is that individuals in a group or organization experience *shared* psychological perceptions of meaning (James et al., 2008).

This conceptual explanation and definition of climate helps resolve many of the earlier problems with what constitutes climate. Particularly three things are worth noting in this respect. First of all, climate is a perceptual phenomenon (Kuenzi & Schminke, 2009) of how the employee perceives the organization. These perceptions concern the meaning attached to the policies, practices, and procedures, which employees try to incorporate into a coherent global representation of the organizations climate (Zohar, 2000; Zohar & Luria, 2005). Secondly, a necessary conditions for climate to exist is that organizational climate to a certain extent must be *shared*; climate is a collective phenomenon (Kuenzi & Schminke, 2009). In other words, for climate to exist the employees must have a degree of consensus about the individual perception of the work environment in their organization or group (James et al., 2008; James & Jones, 1974). Practically speaking, when the perceptions of climate dimensions are strong (i.e. high level of agreement on the climate perceptions), employees have a similar understanding of the climate (Dickson, Resick, & Hanges, 2006; Klein, Conn, Smith, & Sorra, 2001). Thirdly, the clarification of organizational climate as an organizational level phenomenon was important for the advances in climate research (Schneider et al., 2013). Measured at the individual level, psychological climate is aggregated to the organizational

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level, usually by referent shift composition model (Chan, 1998; Kozlowski & Klein, 2000; LeBreton & Senter, 2008). This model indicate the group or organization as the point of reference, rather than individuals own perspectives (Chan, 1998). Where consensus exists (e.g. the degree of within-unit variance, see Luria, 2008; Schneider, Salvaggio, & Subirats, 2002), this is presumed to imply “sharedness” on the individual perceptions of climate, and therefore a reflection of the organizational climate. For studies investigating the importance for climate strength and climate consensus, see e.g. Dawson, Gonzalez-Roma, Davis, and West (2008); González-Romá, Peiro, and Tordera (2002); or Sowinski, Fortmann, and Lezotte (2008).

Specific and general organizational climate

Despite the aforementioned advances in the study of organizational climate, Kuenzi and Schminke (2009) argue that the research on climate is still fragmented. The literature on organizational climate shows an emphasis on both specific, and general measurements of climate (i.e. a difference in the strategic focus on the climate dimensions). Climate was originally developed as a broad concept for explaining climate in general in organizations called global climate. However, Schneiders (1975) seminal article created a significant shift in the research on climate. According to Schneider (1975), the focus of climate depends on the criterion of interest, and he contends that rather than conceptualizing climate as general, generic constructs, climate should be conceptualized as a domain-specific “climate for something” (Schneider, 1975, p. 472). There are now several different studies on specific climate, for instance climate on safety (e.g. Beus, Payne, Bergman, & Arthur, 2010; Zohar, 2000; Zohar & Luria, 2005), justice climate (e.g. Liao & Rupp, 2005; Yang, Mossholder, & Peng, 2007), and climate for service (e.g. Dietz, Pugh, & Wiley, 2004; Schneider, 1990; Sowinski et al., 2008). However, these specific climates are often context specific, and thus their explanatory value is limited to the specific focus of these “climates for something” in a particular context. For instance, Ghahramani and Khalkhali (in press) developed a scale for safety climate specifically for the manufacturing industry in Iran. Global climate on the other hand is a more broad assessment of the climate in organizations, and can be assessed across different organizations and cultures (e.g. Bernstrom, Lone, Bjorkli, Ulleberg, & Hoff, 2013; Patterson et al., 2005). For a comprehensive discussion and review of the general and specific approaches to climate, see Schneider and Barbera (2014) or Schneider et al. (2011).

Measuring organizational climate

Despite the long research tradition of organizational climate, there exist few validated, theoretically based instruments for measuring organizational climate (Kuenzi & Schminke, 2009; Patterson et al., 2005). This can to a large extent be attributed to the conceptual

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problems in climate research (Patterson et al., 2005). Both from the specific and general traditions of climate approaches, there have recent been calls for theoretical development and integration of the climate research (Kuenzi & Schminke, 2009; Patterson et al., 2005; Zohar, 2010). For example, in an attempt to address these weaknesses in the climate research, Patterson and colleagues (2005) developed a global climate measure called the Organizational Climate Measure (OCM). The OCM is a multi dimensional measure of organizational climate, covering a broad range of 17 different climate dimensions rather than global climate in itself. These dimensions were mapped onto the Competing Values Framework (CVF), each representing specific dimensions of climates with four competing value orientations. Originally, Patterson et al. (2005) proposed that researchers choose among these climate dimensions, selecting only those relevant to their subject of interest. The OCM have been validated in the UK manufacturing industry, and the instrument has also been given preliminary support as a reliable and valid instrument in the Norwegian context (Bernstrom et al., 2013). Additionally, the OCM has been used to investigate the climate in the police investigative work in Norway (Bø, 2014; Fjeld, 2013; Lone & Garnaas, in review). Thus, this represents one possible way of approaching the measurement of climate in the police. However, the OCM is a comprehensive global measure, consisting of a total of 82 items. Also, studies investigating climate in the Police Service with the OCM measure only found a moderate fit of the climate dimensions to describe the police work environment, (e.g. see Fjeld, 2013; Lone & Garnaas, in review). This may indicate that the strategic use of OCM as proposed by Patterson et al. (2005) may be more appropriate, consequently selecting only those dimensions that are relevant. Therefore, a new approach to the measure of the global climate in the police is needed.

The central question of interest here is what approach to the study of police climate is most appropriate, balancing the need for a specific “tailored” model of the police climate (Yilmaz, 2013), yet at the same time being able to establish clear patterns and drawing on existing research findings. So far, the literature review has revealed a focus on either global climate, or specific contextual measurements of climate. This presents a dilemma with regards to which focus should guide the police climate measurement. The next section will focus on this division, presenting alternative to the measurement of climate that tries to incorporate both perspectives. Then the theoretical framework for the development of the climate instrument will be presented in more detail, before presenting the aim of this study.

Measuring different climates at multiple levels of analysis

Two recent developments within the climate field are worth noting with respect to the issue of police climate measurement in this study. First, because of the separation of general climate on the one hand, and specific climates on the other, a recent development in the climate research has been the avocation for an integration or taxonomy of these different climate studies (e.g. Carr, Schmidt, Ford, & DeShon, 2003; Kuenzi & Schminke, 2009; Zohar, 2010). According to Zohar (2010), the conceptual ambiguities within the literature resembles the conceptual challenges in climates infancy, and an effort towards theoretical issues is needed for the climate research to advance. Secondly, climate has mainly been studied from one level of analysis, e.g. group-level (e.g. Rafferty & Jimmieson, 2010; Zohar, 2000) or the organizational level (e.g. Hannevik, Lone, Bjørklund, Bjørkli, & Hoff, 2014). However, a recent development is the study of climate across multiple levels of analysis (Kozlowski & Klein, 2000; Zohar & Luria, 2005). Consequently, this enables the conceptualization and study of climate at multiple levels of analysis across groups in an organization, and thus examining the relationship between group-level and organizational-level climate. In fact, some studies indicate that climate may exist at different levels in an organization, and that climate differs across subunits within organizations (e.g. Kozlowski & Klein, 2000; Zohar & Luria, 2005). Interestingly, in the Police Analysis (NOU 2013:09, 2013) it was argued that there are cultural differences between police districts, as well as problems with coordination across the different levels of the police organization. The multiple level of analysis of climate then incorporates both perspectives, and offers the possibility of investigating climate differences across units in the police organization. Therefore, this approach may provide a useful first step towards a tailoring model for the measurement of police climate, with focus on both the global and specific police climate.

An integrated model of organizational climate

In line with the argument for an taxonomy of the climate literature, Kuenzi (Kuenzi, 2008; Kuenzi & Schminke, 2009) proposed an integrated model for measuring both specific and general climate, drawing on the Competing Values Framework (Quinn & Rohrbaugh, 1983) as a theoretical foundation. However, in contrast to the OCM, Kuenzi's global approach to global climate "is a construct in and of itself" (Kuenzi, 2008, p. 86). That is, this global assessment does not consist of many different climate dimensions (Patterson et al., 2005), but four distinct climate types corresponding to the four quadrants in CVF.

Further, Kuenzi (2008) provides a practical tool for such an enquiry. In her doctoral thesis, she put forward an integrated model for assessing both global and specific climates in

organizations, and her finding give preliminary support for the possibility to operationalize and measure global climate, as well as an integrated model for measuring both general and specific climates combined. Building on the Competing Values Framework (Quinn & McGrath, 1985; Quinn & Rohrbaugh, 1983), the model answers both calls for a clear theoretical framework, as well as a model for integration of the specific and general climate assessments. This framework also has the potential to organize research on focused climate, allowing future research to identify gaps in the climate literature (Schneider et al., 2011).

The Competing Values framework has been widely used in studies of global climate and culture, and especially where the focus is on organizational performance (Gregory, Harris, Armenakis, & Shook, 2009). More recently, the CVF has also been shown to be a useful framework for facet-specific climate. For instance, Colley, Lincolne, and Neal (2013) found that different perceptions of values in the CVF impact organizations safety climate. According to Ostroff and Schulte (2014, p. 536), the CVF is also one of the most used typologies in survey based approaches to climate and culture, and therefore a well established framework for research. Thus, this theoretical framework may be appropriate for both specific and general climate measures. Therefore, given the multiple conceptualizations of climate and problem of what dimensions to include, this study adopts the Competing Values Framework as a theoretical framework for the measuring of climate. These competing values offer a way of identifying the police climate, i.e. the policies, procedures and strategies along competing values that organizations face. This framework will now be presented.

The Competing Values Framework

The Competing Values Framework (CVF) was developed by Quinn & Rohrbaugh (Quinn & Rohrbaugh, 1981, 1983) to explain the different values that an organization has, and how they relate to one other. Initially developed as a part of research on indicators of organizational effectiveness (Campbell, 1977), the CVF was also proposed as a diagnostic tool for explaining the multiple dilemmas in organizations (Quinn & McGrath, 1982). The original Competing Values Framework consists of three value dimensions (Quinn & Rohrbaugh, 1983); organizational focus, organizational structure, and means-ends. However, the means-ends dimension is not included in the contemporary versions of the CVF (Cameron & Quinn, 2011; Cameron, Quinn, Degraff, & Thakor, 2006), and will not be presented here (for more details, see Quinn & Rohrbaugh, 1983). Taken together, these form a multidimensional framework for understanding and organizing climate dimensions. The first dimension is organizational *focus*, where emphasis is on the development and well being of people ranging from an internal focus on people to an external focus on the organization itself.

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The second value dimension is organizational *structure*, ranging from an emphasis on stability to an emphasis on flexibility (Quinn & Rohrbaugh, 1983). Taken together, these two value dimensions reflect four different organizations focuses; the human relations model, the open systems model, the rational goal model, and the internal process model (see Figure 1). A fundamental assumption in the CVF is that these values are competing, and therefore represent dilemmas that employees face in organizations. However, the model does not propose restricted taxonomy of the values. Rather, all values coexist in the organization, with some values given more weight than others (Kimberly & Quinn, 1984; Quinn, 1988). Consequently, an emphasis on one value gives less weight to the corresponding value on that dimension (e.g. emphasis on control and less focus on flexibility). This also applies for the different models, which each have a polar opposite model on the off-diagonal (e.g. human relations climate contrasts with rational goal climate) (Quinn & Rohrbaugh, 1983). These four models will now be presented.

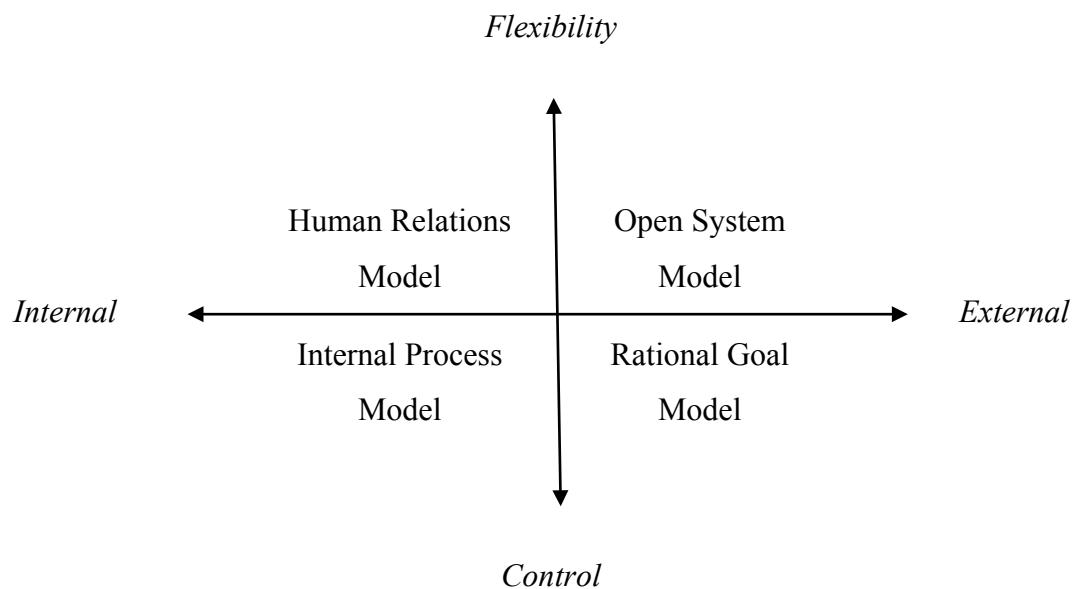


Figure 1. The Competing Values Framework, based on Quinn & Rohrbaugh (1983)

The human relation model emphasizes on flexibility and has an internal organizational focus. As such, focus on the development of human resources and the well being of employees are considered important values, and means to achieve this goal are focused on morale and unity. Teamwork and the involvement of employees are seen as the best way to handle the external environment (Cameron & Quinn, 2011). *The open system* model places emphasis on external organizational focus and flexibility, where flexibility and readiness to

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change are perceived as important way to achieve growth, resource acquisition, and external support (Quinn & Rohrbaugh, 1983). *The rational goal* model emphasizes external focus and control, where planning and goals are seen as important means to achieve productivity and efficiency. The last model, *internal process model*, emphasizes control and internal focus, where information management and communication are seen as important means to achieve stability and control (Quinn & Rohrbaugh, 1983). Formal rules and procedures are seen as what holds the organization together (Cameron & Quinn, 2011).

Why a separate instrument?

An important question that must be answered is why a separate, new instrument for measuring organizational climate in the police is needed. There are several reasons. First of all, the police organizations internationally (COMPOSITE, 2014; van den Born et al., 2013; Yilmaz, 2013), and especially the Norwegian Police organization, are under strong pressure to reform and change. There is therefore a need for precise and detailed information about the climate and internal structures of the police before a change process (van den Born et al., 2013; Yilmaz, 2013). Secondly, to the authors knowledge, no instrument measuring police climate exist, and other existing instruments do not successfully tap into all salient features of police climate (Bø, 2014; Lone & Garnaas, in review). Thus, there is a gap in the knowledge of the police climate, despite its importance (e. g. NOU 2013:09, 2013; Yilmaz, 2013). Thirdly, the importance of initial assessments of the organizational change is critical for the success of organizational change (Bouckenooghe, Devos, & Van den Broeck, 2009; Vakola, 2014). Importantly, the measurement must take into consideration the unique organizational characteristics (Yilmaz, 2013). Therefore, by combining both the general and specific approach to organizational climate, this allows for an investigation of both the strategic focus of the police, as well as comparison across district levels, and between organizational levels.

The present study

The aim of this study is to develop and evaluate a new instrument for measuring police climate. This is motivated by the impending police reform in Norway, and represents an initial step towards a tailoring approach to police reform internationally (Yilmaz, 2013). This study will build upon the organizational climate literature as a framework for understanding and measuring police climate. Thus, an important question is whether the investigation should be guided by a global or climate-specific approach. The present study combines both approaches. The development of the instrument is guided (Clark & Watson, 1995; DeVellis, 2012) by the Competing Values Framework. Therefore, global climate is measured through Kuenzi's (2008) global climate measure, while the climate-specific measure is based on

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modifications of integration (Patterson et al., 2005). Because identifying barriers to change is important (Rafferty & Jimmieson, 2010), an outcome variable measuring individual readiness (Vakola, 2014) to organizational change is also included.

This study will take an exploratory approach, and as such no specific hypothesis will be tested. The overall aim will be achieved through analysis of (1) the dimensionality of the proposed measurement scales, and (2) the internal reliability of the scales. Additionally, the nomological validity (Cronbach & Meehl, 1955) of the constructs will be investigated. This will be achieved through analysis of the intercorrelations between the scales, and by comparing this to theoretical and empirical expectations.

Method

The research project

This study is part of a long-time collaborative research project between the Norwegian Police University College and the research group at the Work and Organizational Psychology at the Department of Psychology at the University of Oslo.

The Norwegian Police Service

The Norwegian Police Service consists of twenty-seven Police Districts, and seven special agencies. The regional police districts comprise of 339 local police stations and 354 police offices, and there are considerable local variations in different districts (NOU 2013:09, 2013). Each police district has a Police Chief, who is responsible for the results in that particular district. The Police Service is subordinated the Ministry of Justice and Public Safety, which has the constitutional responsibility for the police force in Norway (Politiet, 2014). The Directorate of the Police has the responsibility for the professional management, leadership, and development of the Police Service. The Directorate also governs and coordinates the activities in the police districts. The Norwegian Police organization has about 15 000 employees (Humlegård, 2014).

Ethics

This study followed the Norwegian national ethical standard for research on human beings. The informants gave their informed consent to take part in the study and the participants' anonymity was ensured. No personal information was collected in the survey or later in this study, and the data was stored at a safe database in accordance with established safety routines for sensitive data at the Department of Psychology. The aim of this study was not an organizational intervention, but to test a pilot instrument for measuring police change climate. No negative effects of the study on the participants were anticipated.

Preliminary study and development of initial item pool

Several considerations were taken before and during the development of the instrument. In order to establish a preliminary item pool for the police survey instrument, two sources were used; a qualitative pilot study and a literature review. Because the purpose of this study was to measure police climate, it was important to gather information about how the different members of the police organization described their work environment. Thus, a preliminary interview study was conducted with operative police and police prosecutors. The result were discussed in the research group, and compared to existing data in the project on police investigators (e.g. Bø, 2014; Lone & Garnaas, in review). No substantial discrepancies were found. Through a literature review, several existing measurements were identified and evaluated, and finally three measurements were chosen (see Kuenzi, 2008; Patterson et al., 2005; Vakola, 2014). Because the original measurements of global climate, and change readiness were developed in English, the measures were translated into Norwegian by the author. The standard method for translation is back-translation by two bilingual speakers to identify discrepancies in meaning or syntax (Brislin, 1970; Mullen, 1995). However, this was not possible in this study, and therefore may have reduced the reliability and validity of the measurement. Following the recommendations of Chan (1998), a referent-shift approach was adopted for all scales, except the individual readiness to organizational change-scale. The initial item pool was then revised several times based on feedback from the research group to increase construct validity. After these revisions, the instrument consisted of 63 items. Each construct was measured with several items (from 6 to 12 items) so that the items pool could be reduced based on items performance in later analysis.

Table 2

Steps in the questionnaire development

Step 1	Step 2	Step 3	Step 4
Literature review, and pilot interviews	Development of initial items pool (iterative process)	Revisions by research project members, and members of the police organization	Administration of item pool to a pilot sample

Feedback from police members. In order to try to reduce item bias, and increase construct validity (Clark & Watson, 1995; van de Vijver & Hambleton, 1996), the instrument was submitted to a group of five experienced police members for evaluation. The group

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consisted of police prosecutors, criminal investigators, and one operative police from different police districts. The group was given the written instrument in advance, and were instructed to evaluate the clarity and validity of the concept used, based on their organizational experience. To clarify and reduce redundancy, all items were checked. In the feedback meeting, the instrument was examined page by page. The group members were asked to give their opinion on the different items, and to indicate any potential problems or ambiguities. Based on their feedback, only minor changes were made to the wordings of some of the items, e.g. “job description” (Norwegian: stillingsbeskrivelse) was replaced by “job instruction” (Norwegian: stillingsinstruks). However, the members identified an issue with the concepts used to explain the organizational levels, as they all used different concept for describing their work groups and departments. Thus, a new formulation of the different organizational levels was proposed and agreed upon. Additionally, a simplified organizational map was also added to explain the organizational levels, as the group noted some difficulty in applying this for all the police districts. The final version of the pilot instrument is presented in appendix F.

Measurement

Each survey began with instructions and demographic information (gender, age group, line of work, job tenure, and police district). Participants were encouraged to give their answers based on their own experiences and evaluations. The participants were requested to answer all questions in the survey, as far as possible. The different measurements in instrument will now be presented in the following section.

The next part of the instrument consisted of three different scales. The scales were presented in a non-randomized, coherent format with items belonging to each scale presented together. These included measurements of (a) organizational climate, (b) integration (internal and external), and (c) individual readiness to organizational change. Unless otherwise indicated, a 5-point response scale ranging from 1 “Definitely false” to 5 “Definitely true” was used for all scales, such that higher values reflected higher values on that variable (negative wordings were reversed). The middle value was “neither true nor false” to allow for neutral responses and try to reduce uninformed responses (Wilcox, Bellenger, & Rigdon, 1994). The first two scales were at the organizational and unit level of analysis, whereas the last scale was at the individual level. The questionnaire consisted of a total of 63 items. After each scale, a comment box followed to allow participants to give further information or comments to the pilot instrument. This was included for use in later refinements of the instrument, and will not be discussed here. The different scales will now be presented in turn (see table 3 for an overview of the scales).

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Table 3

Scales and constructs measured in the instrument

Scale	Items	Example item	Level of analysis
Global climate	28	“Rules and policies are clearly communicated to us here at this unit”	Organizational unit level
Internal integration	12	“There is very little conflict between groups at this unit”	Group level
External integration	12	“There is very little conflict between units in this police district”	Organizational unit level
Individual readiness to organizational change	6	“When changes occur in my company, I believe that I am ready to cope with them”	Individual level

Organizational climate. Organizational climate was operationalized as a set of shared perceptions regarding the policies, practices, and procedures that an organization rewards, supports, and expects (Schneider & Reichers, 1983). The measure of organizational climate was based on Kuenzi’s (2008) global work climate, which draws upon the Competing Values Framework (Quinn & Rohrbaugh, 1983). As noted earlier, the items were measured at the organizational unit level, and used the different units in the Police Districts as the point of reference (Chan, 1998). Global organizational climate was measured with 28 items, capturing global evaluations of organizational climate in the police districts. An example of an item is “Rules and policies are clearly communicate to us here at this unit” (Norwegian: Regler og retningslinjer er tydelig kommunisert til oss her på enheten).

Integration. Integration is defined in the OCM as “the extent of interdepartmental trust and cooperation” (Patterson et al., 2005, p. 386). This is a facet-specific climate construct. The measure of integration was based on the integration items in Organizational Climate Measure (OCM) by Patterson et al. (2005). Integration was measured through five questions. For translation of the items, the translation and validation of the OCM in Norway by Bernstrom et al. (2013) was adopted. Additionally, two adjustments were made to the integration scale. First, a *structural* adjustment was made, where integration was measured both internally and externally, i.e. within the work unit (between groups), and with reference to other work units in the police district (between units within a Police District). Secondly, an

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adjustment to the *content* of integration was made where the concept of integration was expanded to include the degree of competence sharing and information sharing. The adjustments to the integration scale was based on the findings of Lone and Garnaas (in review). In short, they found that competence and information sharing could be seen as a salient feature of the police climate, and further that integration consisted of two structural components. Integration was therefore operationalized as the degree of interdepartmental trust, cooperation, competence sharing and information sharing, and measured both within the police station (internal integration) and externally within the police district (external integration). The scale consisted of a total of 24 items (12 items for the internal scale and 12 items for the external scale). An example item is “There is very little conflict between groups at this unit” (Norwegian: Det er svært lite konflikt mellom grupper her på enheten).

Individual readiness to organizational change. Given the importance of individual perceptions and readiness for change for a successful change implementation (e.g. Bouckenoghe et al., 2009; Rafferty & Jimmieson, 2010; Vakola, 2014), an outcome variable measuring readiness at the individual level was included. Individual readiness to organizational change was operationalized as “...willingness to support change and confidence in succeeding in change” (Vakola, 2014, p. 196). This was expected to be depending upon whether the individual perceives the benefits of the change to be greater than the anticipated negative effects. Individual readiness to organizational change was measured with 6 items adopted from Vakola (2014), and translated to Norwegian by the author. An example item is “When changes occur in my company, I believe that I am ready to cope with them” (Norwegian: Når endringer skjer på min enhet, tror jeg at jeg er klar for å takle dem”).

Level of analysis. Following the recommendations of Kuenzi and Schminke (2009), the level of measurement of climate will be explained in brief (see table 3). When measuring climate, the referent shift approach (Chan, 1998) was adopted. That is, questions asked about the work unit in general with reference to the unit, e.g. “We are always ready to take on new challenges here at this unit” (Vi er alltid klare for å ta tak i nye utfordringer her på enheten). For more information on composition models, see Chan (1998).

Procedure and administration

Participants were recruited from different educational seminars held at the Norwegian Police University Collage (NPUC). The teachers arranged for access to informants at the lectures at the NPUC, in the period between 11th of March to 16th of April. Participants from different police districts, or participants who worked in the special agencies, but were located in the Police Districts, were requested to participate. At the seminars, participants were

informed that participation was voluntary and that their anonymity would be ensured. Surveys were hand delivered to the participants in each seminar by the author, and answered by pen-and-paper. The questionnaires were returned in a closed envelope after completion at the end of the seminars, and manually entered in IBM SPSS 22. The data was stored at a safe database in accordance with established safety routines for sensitive data at the Department of Psychology, University of Oslo.

Statistical methods

The data was analyzed with IBM SPSS 22. A common approach in scale development is to split the data into two random subsamples, and cross-validate the model. This can be done by a randomized split-half of the data, and then first conduct exploratory factor analysis (EFA) on the first half to improve the model, and secondly validate the new model with confirmatory factor analysis (CFA) on the second part of the data. However, the data sample in this study was not large enough to split the data in two subsamples for factor analysis (Tabachnick & Fidell, 2007).

For scale development, factor analysis (FA) is generally preferred over principal components analysis (Worthington & Whittaker, 2006). Put briefly, main difference between the two approaches is that PCA tries to account for all the variance (common and unique variance), where as the purpose of FA is to account for the common variance among items, i.e. determining the latent variables underlying the item set. As such, the FA is more appropriate for scale development as identifying manifestations of the latent variables is one of the main goals of the initial analysis (DeVellis, 2012; Worthington & Whittaker, 2006), and the results obtained from FA may also generalize more effectively to CFA than PCA (Floyd & Widaman, 1995). Therefore, the data were analyzed with common factor analysis.

To address the research question in this study, exploratory factor analysis used in order to determine how many latent variables underlies the set of items in each scale. EFA can be used to assess the construct validity of a scale during the initial development of an instrument (DeVellis, 2012; Worthington & Whittaker, 2006). If more than one factor solution were obtained, several statistical and theoretical evaluations were done in order to choose the most appropriate solution for the data. Another reason for choosing EFA was to investigate which items loaded strongest on each factor, i.e. how well the different items were performing, and identify items for elimination in later scale refinements. Once the dimensionality of the items was established, analysis of internal reliability and intercorrelations between sub scales was conducted.

Results

Response rate and missing values

The survey was distributed to 246 participants who attended education seminars at the NPUC between 11th of March 2015 and 16th of April 2015. 195 surveys were returned, yielding an initial response rate of 79.3 per cent. After removal of unusable returned surveys (3 blank and 4 with missing data on the integration scale), the final response rate was 76.4 per cent. Screening of the data and missing value analysis (see next section) supported retaining the rest of the data for further analysis. Hence, the final data set consisted of 188 participants.

Age group range was from *23 years or younger* to *54 years or older*, with the most frequent age group being 33-35 years (17,0 %). 109 women and 78 men (one missing value for sex) completed the survey, with a mean job tenure of 11 to 15 years. The number of respondents from each Police District ranged from 1 to 27, with all 27 Police districts represented. In addition, the sample also consisted of 9 participants from special agencies. Of the respondents, 92 (48,9 %) worked with criminal investigation, 25 (13,3 %) worked as operational personnel, 33 (17,6 %) were criminal prosecutors, 14 (7,4 %) worked with crime preventive work, and finally 23 (12,2 %) had other work tasks (e.g. administrative tasks). There was one missing value for the work responsibility category.

As expected with pen-and paper questionnaires, there were some missing values. Still, the percent of missing values for each question was very low, between 0 and 2,1 %. Little's MCAR test (Schafer & Graham, 2002) was run to investigate whether the data was missing complexly at random. Little's MCAR test was non-significant ($p < .05$), thus supporting the hypothesis that the missing data was missing completely at random. Based on this, for all further analysis it was assumed that data was missing completely at random. To maximize the use of the collected data, missing data was excluded pairwise in the factor analysis.

The suitability of the data for factor analysis

Prior to performing the factor analysis (FA), the suitability of the data for factor analysis was assessed. There are two main issues to consider in order to determine the appropriateness of the data for factor analysis; strength among the inter-correlation between items, and sample size (Floyd & Widaman, 1995). Inspection of the inter-correlations revealed the presence of several coefficients of .3 and above. There were no indications of high multicolliniarity (see appendix B and C for correlation matrix). Further, the measure of sampling adequacy, as given by the diagonals of the anti-image correlation matrix for both the global climate scale and the integration scale, were all over .5, supporting the inclusion of each item of the scale in the factor analysis. Additionally, the Kaiser-Meyer-Okin (Kaiser,

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1970) measure verified the sampling adequacy for the global and integration scales, exceeding the recommended value of .6 (Kaiser, 1974). This indicated that correlations between items were sufficiently large for FA, and thus supporting the factorability of the data. Bartlett's test of sphericity (Bartlett, 1950) reached statistical significance, giving additional support for the factorability of the correlation matrix for FA (see table 2).

Table 4

KMO and Bartlett's test of sphericity for the data for the climate scales

	Global climate	Integration
Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO)	.898	.890
Bartlett's Test of Sphericity		
<i>Approx. Chi-Square</i>	2273.881	2525.983
<i>df.</i>	378	276
<i>Sig.</i>	.000	.000

Additionally, skewness and kurtosis should be acceptable within the +2 to -2 range when the data are normally distributed (Tabachnick & Fidell, 2007). There were no items in the data set that showed any deviation from normality in the overall normality test, and all but one item was in the +1 to -1 range. Item 2 of the global climate scale showed kurtosis > 2, indicating little variance. However, this item was retained as it was shown to have good discriminant validity in later analysis. Consequently, with one reservation, it was concluded that the factorability of the data for the global and integration scale was supported.

The issue of sample size for factor analysis concerns the reliability of the factor structure obtained in a study, i.e. how well the factor structure obtained generalizes beyond the study sample. There is no consensus on how large the sample size should be, and disagreements concerns both the relative ratio of subjects to variables, the absolute size of the sample (DeVellis, 2012), and item communalities (MacCallum, Widaman, Zhang, & Hong, 1999). However, empirical research on sample size indicates that small sample can still yield stable factor solutions (Arrindell & van der Ende, 1985; Preacher & MacCallum, 2002). The reliability of the factor solution is influenced by the absolute sample size and factor loadings, and thus factor solutions can be interpreted on the basis of sample size. Some argue that if a factor has four or more loadings greater than .6 it is reliable regardless of size (Guadagnoli &

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Velicer, 1988), whereas Tabachnick and Fidell (2007) claim that small sample sizes of less than 150 can be sufficient if factor solution have several high loadings ($>.80$). This is further supported if communalities are high and few factors are extracted (MacCallum et al., 1999; Preacher & MacCallum, 2002). For a discussion on sample size in factor analysis, see MacCallum, Widaman, Preacher, and Hong (2001) or MacCallum et al. (1999). For this study, it was concluded that the sample size was adequate for factor analysis, with certain reservations regarding the communalities, as well as the magnitude and number of factor loadings. Thus, given the sample size, the cut-off was set at $>.40$ for factor loadings with at least four factor loading for each factor. In addition, several criteria were used for investigating the number of factors underlying each scale.

Investigation of the dimensionality of the global climate scale

The 28 items of the global climate scale were subjected to exploratory factor analysis (FA) with Maximum likelihood ($\delta = 0$) and Kaiser's normalization for extracting factors. Prior to performing FA, the suitability of data for factor analysis was assessed, as presented above (see table 4). An initial analysis was run to obtain eigenvalues for each factor in the data. Five factors had eigenvalues exceeding the Kaisers criterion of 1 (Kaiser, 1960), explaining a combined total of 48,25% of the variance. However, the last factor just exceeded the eigenvalue criterion (1.040) and did not contribute much to the model (3,72 % explained variance). An inspection of the scree plot (Cattell, 1966) revealed slightly ambiguous inflexions, and would justify retaining both 4 and 5 factors. Additionally, the presence of a Heywood case (i.e. communalities greater than 1.0) in the five-factor solution, and only two factor loadings on the first factor indicated that this model might be overfactored (Fabrigar, Wegener, MacCallum, & Strahan, 1999). Heywood case occasionally occur in ML for common factor analysis, and often indicate that either a misspecification model has been fit to the data, or that some of the assumptions of FA are violated (Fabrigar et al., 1999). Consequently, the assumptions in ML, including normality were investigated further, but no discrepancies were found, and did not disqualify the choice of retaining item 2. Additionally, the theoretical plausibility of the four-factor model and the strong indications of a model from the scree test, PA (see below) and eigenvalues criteria indicated that the presence of a Heywood problem might not be a problem. For more details on the Heywood case, see Heywood (1931) or Dillon, Kumar, and Mulani (1978). Based on this, the five-factor solution was rejected. Given the small sample size, Horn's parallel analysis (PA) (Horn, 1965) was run to verify that the eigenvalues were not obtained by chance. The analysis showed only three

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factors with eigenvalues exceeding the corresponding criterion values for a randomly generated data matrix of the same size, and thus suggested a three-factor solution.

In order to determine the number of factors to retain, both the three- and four-factor solutions were obtained with both varimax, and direct oblimin rotation ($\delta = 0$) to ease the interpretation. Strong inter-correlation between some of the factors ($>.4$) supported the oblimin rotation. For the three-factor solution, item 7, 9, 11, 12 and 13 had factor loadings under the set criteria of $.40$. In addition, the interpretation of the three-factor solution proved complex. Although the interpretation of factor 2 and 3 was in resemblance with the theoretical assumption of CVF, explaining human relations climate and open system climate, respectively, the first factor proved more difficult due to factorial complexity of the items. Items loadings represented all but the human relations items, and correlations were relatively strong ($>.4$ to $>.6$). Thus, only the human relations factor seemed to measure something unique. The results from the three-factor solution are presented in appendix D.

Visual inspection of the pattern matrix, as well as the improvements of the four-factor model for the extracted communalities, suggested retaining a four-factor model, compared to the three-factor solution. Additionally, the two models were compared for model fit: chi-square goodness of fit and Root Mean Square Error of Approximation (RMSEA). In brief, smaller ratio of 3 to 1 a between chi-square and degrees of freedom indicate better model fit (Tabachnick & Fidell, 2007), and RMSEA of $.05$ or less would indicate a close fit of the models (Browne & Cudeck, 1992). The two models were tested, and values obtained were as follows: for the four-factor model a chi-square of 382 ($df=272$) and RMSEA of $.04$, and for the 3-factor model a chi-square of 462 ($df = 297$) with an RMSEA of $.05$. The uses of goodness of fit indices are disputed, however they give some indications of how many residual correlations the model cannot explain. However, the RMSEA should be interpreted with caution as this rewards simpler models (Fan & Sivo, 2007), and is based on subjective judgment (Browne & Cudeck, 1992). Nevertheless, taken together this opts for retaining the four-factor model as this indicated a slightly better model fit of the data.

The rotated four-factor solution revealed the presence of simple structure (Thurstone, 1947), with all four factors showing a number of moderate to strong loadings, and all variables loading substantially on just one factor, thus reducing the factorial complexity. The interpretation of the four-factor solution was partially supported the theoretical models underlying the global climate scale (Kuenzi, 2008; Quinn & Rohrbaugh, 1983). Based on the ease of interpretation compared to the alternative three-factor solution, the four-factor solution was chosen for further analysis.

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Table 5

Pattern and Structure Matrix for the refined Four-Factor Solution the Global Climate Items

Item	Pattern matrix				H ²	Structure matrix			
	OS	HR	RG	IP		OS	HR	RG	IP
Q16	.825	-.002	-.043	-.040	.625	.788	.310	.295	.305
Q19	.730	-.031	.097	-.073	.537	.727	.274	.368	.287
Q15	.718	.139	-.109	.079	.610	.764	.434	.286	.401
Q17	.571	.029	.097	.145	.512	.690	.355	.426	.459
Q18	.508	.002	.074	.262	.505	.658	.342	.425	.526
Q2	.023	.834	-.065	-.140	.613	.278	.767	.143	.173
Q3	-.018	.784	-.081	.031	.588	.285	.763	.177	.297
Q1	.035	.593	.198	.143	.611	.430	.728	.473	.494
Q5	.031	.495	.120	.087	.369	.326	.581	.334	.358
Q4	.072	.455	.223	.172	.509	.434	.625	.485	.497
Q25	.016	.030	.875	-.116	.705	.356	.270	.834	.334
Q27	.300	.044	.588	-.047	.578	.552	.337	.709	.394
Q24	-.085	.060	.528	.151	.364	.236	.255	.585	.398
Q22	.065	-.013	.465	.122	.318	.315	.212	.549	.375
Q8	.066	.049	.021	.671	.541	.394	.352	.396	.730
Q9	-.007	.042	-.054	.622	.374	.263	.271	.263	.609
Q11	.064	-.008	-.015	.553	.250	.300	.236	.283	.571
Q10	-.002	-.010	.159	.408	.329	.244	.204	.356	.481
Eigenvalue	6.359	1.709	1.531	1.289					
Explained variance	35.32	9.49	8.50	7.16					
Total explained	60.49								

Note. Major loadings for each item are boalded. RG = Rational Goal climate, HR = Human Relation Climate, OS = Open System Climate, IP = Internal Process Climate.

Elimination of items and refinement of scale. One of the advantages of factor analysis is the possibility to evaluate how well each item is performing, and thus consider elimination of items (DeVellis, 2012). There are several different criteria for eliminating items. Factor loadings should generally be considered meaningful when they exceeded .30 or .40 (Floyd & Widaman, 1995). Given the small sample size, for this study the limit was set at .40 (Hair, Tatham, Anderson, & Black, 1998). Additionally, in factor analysis a simple structure reflecting the dimensionality of the data can be seen as the overall goal (Sass & Schmitt, 2010). Therefore, the differences between factor loadings of an item should be < .2.

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Based on this, several factor analyses were conducted to identify the best factorial solution for the data set. This resulted in a four-factor solution with 18 items, where the following items were eliminated: 6, 7, 12, 13, 14, 20, 21, 23, 26 and 28 (see appendix A for item labels).

When the unidimensionality of the refined version of the global climate scale had been established, analysis of reliability was assessed with Cronbach's alpha, and descriptive statistic for the new scale was calculated. The results are presented in table 6. The internal reliability analysis supported retaining all items that were chosen in the factor analysis. However, the open system climate scale did not meet the criteria for acceptable alpha, of $>.70$, and therefore indicate some problems with this scale. This will be discussed later.

Table 6

Descriptive statistic of the global climate scale, with Cronbach's alpha, mean, standard deviation and inter-correlation between sub-scales

	Cronbach's alpha	M	SD	1	2	3	4
Global climate scale							
1. OS	.847	3.59	.673	1			
2. HR	.818	3.99	.582	.471**	1		
3. RG	.759	3.66	.653	.493**	.444**	1	
4. IP	.690	3.38	.609	.456**	.471**	.443**	1

Note. RG = Rational Goal climate, HR = Human Relation Climate, OS = Open System Climate, IP = Internal Process Climate. ** Correlations are significant at the $p < .01$ level

Investigation of the dimensionality of the integration scale

In order to investigate the dimensionality of the integration scale, the 24 integration items were subjected to exploratory factor analysis with Maximum likelihood ($\delta = 0$) and Kaiser's normalization. The FA revealed the presence of three factors with eigenvalues exceeding 1 (Kaiser, 1960), explaining 37,0 %, 13,5 % and 7,5 % of the variance respectively. This was further supported by an inspection of the scree test (Cattell, 1966) and Horn's Parallel analysis (Horn, 1965). Inspection of the pattern matrix however revealed a complex structure, with several high cross-loadings ($\geq .30$), and only one unique factor loading (item 15) for this factor. The ML method for extracting factors frequently overfactor the solution, and several Monte Carlo studies support PA as the most accurate criterion for factor extraction (Hayton, Allen, & Scarpello, 2004). Nonetheless, through several repeated factor analyses a good factorial solution for the three-factor model was not found. Yet, the complex factor

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structure of the three-factor solution is interesting in a development phase (Sass & Schmitt, 2010), and gives indication of a possible third scale measuring some aspect of conflict and suspicion. Still, this may also be a response bias due to the negative wordings of the reversed items. However, further studies are needed to investigate the alternative three-factor solution for integration and will not be discussed in detail here. The three-factor solution is presented in appendix E.

Table 7

Pattern and Structure matrix for the two-factor integration scale

Items	Pattern Matrix		H ²	Structure matrix	
	Internal	External		Intern	External
Q11	.759	-.067	.627	.790	-.419
Q4	.724	-.039	.552	.742	-.375
Q5*	.715	.132	.442	.654	-.201
Q9	.712	-.073	.561	.746	-.403
Q6	.707	-.083	.562	.746	-.412
Q2	.703	.088	.445	.662	-.238
Q12	.692	-.111	.562	.743	-.432
Q1	.675	-.002	.457	.676	-.316
Q8*	.659	.068	.397	.627	-.238
Q10	.609	-.182	.507	.693	-.465
Q3*	.522	.035	.257	.506	-.208
Q7	.518	-.178	.386	.601	-.419
Q22	-.060	-.849	.677	.335	-.821
Q23	.009	-.771	.602	.368	-.776
Q19	-.009	-.753	.561	.341	-.749
Q18	.012	-.743	.560	.357	-.748
Q21	.065	-.688	.519	.385	-.718
Q24	.021	-.664	.455	.330	-.674
Q13	-.013	-.664	.433	.295	-.658
Q16	-.006	-.662	.435	.302	-.659
Q14	-.090	-.647	.372	.210	-.605
Q17*	.106	-.515	.327	.345	-.564
Q20*	.138	-.430	.260	.338	-.494
Eigenvalue	8.78	3.169			
Explained variance	38.21	13.89			
Total explained variance	52.107 %				

* Items are reversed

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Based on the rejected three-factor solution, a two-factor solution using ML with oblimin rotation was run. The two-factor solution accounted for a total of 50,6 % of the variance (factor 1 37 %, factor 2 13,5 %), and showed an approximate simple structure (Sass & Schmitt, 2010), with few cross-loadings within the set criteria. Because the criteria for retaining items were set at .40, item 15 was removed (“People are suspicious of other departments”). The factor solution is presented in table 7 below.

The two-factor solution revealed an approximately simple structure (Sass & Schmitt, 2010), with each item loading strongly on only factor and no cross-loadings above the set criteria for this study ($>.20$). The interpretation of the two-factor solution was consistent with structural adjustment to integration, with factor 1 measuring internal integration and factor 2 measuring external integration.

Once the dimensionality was established, Cronbach’s alpha, and descriptive statistics were computed for the new 23-item integration scale (see table 8). Coefficients alphas were found to range from .83 to .78 for the individual items. However, one item was worth further attention. The analysis showed that one item did not contribute anything to the scales overall reliability, and based on the principle of parsimony, item 20 was therefore deleted. The results indicated high to acceptable internal consistency of the integration (Cortina, 1993), and gives preliminary support to the theoretical foundation of the integration scale. Based on the high reliability of the integration scale, a natural next step in further studies would be to try to confirm the factor structure obtained here and, if the dimensionality is supported, reduce the item set (Clark & Watson, 1995; DeVellis, 2012). This may also indicate whether the high number of items has artificially inflated the alpha (Cortina, 1993).

Table 8

Descriptive statistic of the integration scale, with Cronbach’s alpha, mean, standard deviation and inter-correlation between sub-scales

	Cronbach’s alpha	M	SD	1	2
1. Internal integration	.911	3.56		1	
2. External integration	.902	3.05		.440**	1

** Correlation is significant at the $p < .01$ level

Individual readiness to organizational change

A preliminary analysis of the individual readiness to change scale was run in order to verify the scales’ unidimensionality. This was supported, and showed an approximately

simple structure (Sass & Schmitt, 2010; Thurstone, 1947). Therefore, the internal consistency reliability of the translated scale was estimated with Cronbach’s alpha. Based on the inter-correlations between the items, it was suggested to retain all items but item 4, as this would improve the overall reliability of the scale. The results of the refined version of the scale indicated an acceptable internal consistency of the 5-item scale, with alpha of .784 ($\alpha = .790$), and mean of 3.96 (SD = .53).

Summary of the refined version of the instrument

Based on the established dimensionality of the scales, and analysis of reliability, the correlations between the new scales were computed. This was done to investigate the inter-relationships between the different scales, and to compare them to theoretical and empirical predictions. Concerning the global climate scale, the sub scales are highly intercorrelated, with only small differences between the intercorrelations across the model. Regarding the integration scale, internal integration is strongest correlated with human relations, and external integration is strongest correlated with open system climate. However, due to the highly intercorrelated climate types, this must be interpreted with caution. Additionally, the correlations show only small discrimination between the sub scales across the instrument. Further, as expected, the individual readiness to organizational change is positively strongest correlated with the open system climate, and weakest correlated with the human relations climate. This will be discussed further in the next section.

Table 9
Correlations between scales and sub-scales in the instrument

Instrument scales	OS	HR	RG	IP	5	6	7
1 Open system	1						
2 Human relations	.471**	1					
3 Rational goal	.493**	.444**	1				
4 Internal process	.456**	.471**	.443**	1			
5 Internal integration	.485**	.575**	.500**	.400**	1		
6 External integration	.440**	.349**	.365**	.320**	.440**	1	
7 Individual readiness to organizational change	.335**	.160*	.240**	.262**	.284**	.241**	1

* Correlation is significant at the $p < .05$ level.

** Correlation is significant at the $p < .01$ level.

Discussion

The present study reports the development and initial assessment of a new instrument aimed at measuring police climate. More specifically, this instrument aims to measure the global climate, integration, and individual readiness to organizational change. Questionnaires were distributed to police members from the different police districts, and their responses were recorded. The assessment of the instrument's performance was achieved through exploratory factor analysis, and evaluation of internal reliability. Also, an analysis of the intercorrelations of the scale was conducted.

The new police climate instrument showed promising initial construct validity, assessed by the following criteria: (a) unidimensionality was established by exploratory factor analysis and showed an approximately simple structure for all three scales; (b) the obtained factor structure was consistent with theoretical assumptions underlying the construct measures; and (c) internal reliability measured by Cronbach's alpha was acceptable for most of the measurements scale. However, there were some statistical and theoretical challenges with the instrument. Especially, the investigation of inter-correlations between the different climates showed some mixed support for the instrument. Therefore, the instrument must be seen as still being in a development phase, and should not, at its current stage, be used as a tailored (Yilmaz, 2013) change management of the police organization. Overall, the results of this study are promising, and provide some support for the possibility of using climate as an initial step towards a tailored police reform.

Evaluation of the global climate scale

Statistical performance. Regarding the first organizational climate scale, measured as the four models in the Competing Values Framework, there were some contradictory results. The presence of an alternative factorial solution challenges the stability of the obtained factor structure. Nevertheless, complex models and alternative solutions can yield important information in the development phase of a new instrument (Sass & Schmitt, 2010). More specifically, based on the cross-loadings and the complexity of the obtained solutions, the results give varied support for the four different climate types. For the human relations climate and open systems climate, factorial solution as obtained were more stable. Both the human relations and open system models have flexibility in common, but have different organizational focus (internal and external). Thus, this may indicate that flexibility is perceived as a stronger, salient feature of the police climate, than the other competing values. However, there can be many reasons why these item sets performed better than the other models. However, future studies are needed to investigate the stability of the findings

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obtained in the present study. For the internal process and rational goal climate there were some mixed findings, as these were substantially cross-loaded in the alternative models. However, the refined version of the global climate scale suggested that these are perceived as unique climates, but low communalities indicate some challenges with the obtained values.

Overall, the four-factor solution retained in this study gives preliminary support for the possibility of measuring global climate in the framework of the CVF in the police. The refined version of the scale showed acceptable internal reliability, and moderate factor loadings.

The nomological network of CVF

Another way of analyzing the instrument's performance is by looking at how the different models related to each other within the network of the Competing Values Framework. This concerns the question of the nomological validity of the CVF, i.e. how different construct behave within a network of related constructs (Cronbach & Meehl, 1955). This gives some information about the construct validity of the CVF as obtained in this study. Although the dimensionality of the four climate types were supported, the analysis of the inter-correlations between the climate types are not as predicted based on CVF theory. In brief, based on the CVF, it is expected that the climates with similar organizational focus (*external focus*; open system climate and rational goal climate, *internal focus*; human relation climate and internal process climate) and organizational structure (*organizational flexibility*; human relations climate and open systems climate, *organizational stability*; internal process climate and rational goal climate) would be positively stronger correlated than the climates on the opposite off-diagonal (Cameron & Quinn, 2011; Quinn & McGrath, 1982). Likewise, based on the theoretical assumptions underlying CVF, another expectation is that the climates that are in contrast with each other would be weakly or negatively correlated (e.g. human relations climate and rational goal climate). Further, because the CVF represents competing values, another common assumption is that one or more values are more dominant than others (Kimberly & Quinn, 1984; Quinn, 1988). However, the findings in the present study fail to support the CVF's predicted pattern of interrelationships between the climate types, as well as the inherent paradox in CVF of competing values. First of all, the results indicate that the climate types are not competing or paradoxical, but rather they are all positively inter-correlated. Secondly, climate types that shared organizational focus or structures are not meaningfully stronger inter-correlated than the climate types that do not share values on these two dimensions. Thirdly, as all climate types are highly inter-correlated, and as only human relations climate has a marginally higher mean value than the others; the assumption of a

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dominant climate type is not supported. This indicates that the climate types all coexist and work together (Hartnell, Ou, & Kinicki, 2011), and that all climate types are seen as important for organizational effectiveness and performance (Quinn, 1988). Further, this may indicate that the perceptions of global climate in the police are seen as more complimentary than competing, thus rejecting the hypothesized “dominant” climate types in the police organization.

The finding of complimentary climates, while contrary to the traditional assumptions of CVF, is not new. First of all, multiple climates may exist in an organizational setting. In fact, several researchers have argued for the study of multiple climates in organizational research (Bowen & Schneider, 2013). Interestingly, the conflicting climates may indicate that there exist several sub-climates in the police, or that the climate in the police is categorized by conflicting demands. Secondly, several cultural and climate studies using the CVF have found strong to moderate intercorrelations between the four competing values. For instances, studies on safety climate, or safety culture have found mixed support of the competing structure of CVF (Dietz et al., 2004; Silva, Lima, & Baptista, 2004). Additionally, Lamond (2003) and Kalliath, Bluedorn, and Gillespie (1999) found inter-correlations between the competing values contrary to CVF theory, although they differed in strength from what was found in the present study of the police climate. Furthermore, Colley et al. (2013) notes that the proposed competing relationships between the four quadrants in CVF have been difficult to assess using Likert scale response formats, as the CVF traditionally have been assessed with ipsative measures (Jung et al., 2009).

Based on mixed findings using the CVF, Hartnell et al. (2011) proposed an alternative theoretical approach to the CVF. Rather than seeing the climate types as being competing, he proposed that an organization can exist of multiple climates and competing demands, and that by ignoring the complexity of this relationship (i.e. the “dominant climate approach”) researchers may miss out on the complexity of what defines an organizations climate.

While traditionally understood as competing, Quinn (1988) actually proposed five different models, including a balanced score where values associated with each of the CVF were all strongly held. According to Quinn (1988), organizations with balanced values may have a distinct advantage in managing environmental shift, due to their flexibility. Therefore, conceptually and theoretically, the results obtained in this study of coexisting, balanced climate perceptions should not necessary be rejected based on contradictory findings with theoretical hypothesis of CVF.

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There may be several explanations for the results of the strong inter-correlations between the climate types. Among these are that police perceives the climate in their organization as balanced (Quinn, 1988); the normative response scale may be inappropriate for representing the inherent conflicts found in the Competing Values Framework; common methods bias may have artificially inflated the relationship between the four climate types; the presentation of the item sets together may have increased measurement error due to social desirability and cognitive dissonance; or the theoretical framework may not be appropriate for measuring salient characteristics of the police climate. Nevertheless, based on these findings, a natural question is whether the CVF is appropriate for measuring police climate. Are the findings of highly inter-related climate types in the CVF a reflection of how the police perceive the climate, and if so; does this provide useful information in the tailoring approach to police reform? Based on this study alone, it is not possible to conclude on these questions. This remains an empirical question, and warrants further studies and investigations.

Evaluation of the integration scale

Statistical performance. The measurement of integration was based on the earlier findings of Lone and Garnaas (in review), and two police-specific adjustments to the integration scale from OCM (Patterson et al., 2005) were tested. The first adjustment was to the structure of integration, i.e. whether integration in the police could be separated into two sub dimensions of internal and external integration. The second adjustment was to the content of integration, and proposed that an important salient feature of police integration includes the degree of information and competence sharing, in addition to trust and cooperation (Patterson et al., 2005). The results from the exploratory factor analysis supported the structural adjustment to the integration scale for the police, and showed an approximate simple factor solution with several high factor loadings. Consequently, the results from this study support the findings from Lone and Garnaas, and indicate that the new integration dimension may be a distinct feature of the police work environment. Additionally, the factor analysis supported that the content adjustments as part of the police integration as a broader factor, and not a sub-dimension of integration. Thus, this suggests that integration can have both an internal and external organizational focus, and are different across organizational levels.

Climate for integration

When the inter-correlation between integration and climate were compared, some interesting patterns were found. First, the degree of internal integration is positively related to human relations climate. Thus, where focus is on the stability and cohesion of organizational group this may increase integration across members of that organizational unit. In the OCM,

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Patterson et al. (2005) found that integration was part of the human relations quadrant in the CVF, as supported in this study. An explanation for this finding is that human relations climate stimulates cooperation (Lone & Garnaas, in review), and information and competency sharing, such that groups work closer together. For instance, in a study of police investigator's work environment, Glomseth, Gottschalk, and Solli-Sæther (2007) found that knowledge sharing was influenced by cooperation and trust in team climate. As further support of this finding, Lone and Garnaas (in review) also suggested that a human relations climate could enhance police investigative performance through internal and external cooperation.

When external integration is seen in relation to the different climate types, the result of the present study indicates that external integration is primarily associated with open system climate. Compared to the empirical and theoretical basis of integration (Lone & Garnaas, in review; Patterson et al., 2005; Quinn & Rohrbaugh, 1983), integration is expected to be part of the human relations climate. However, the structural adjustment to climate seems to measure another aspect of integration that is externally focused, measuring on activities between units in the police district. Thus, open system climate seems to be positively related to external integration, such that a focus on external adaption and flexibility supports the sharing of information and competency externally and horizontally in the organization.

When considering this in the context of the proposed new police reform, several important practical implications are identified. Put briefly, the police analysis proposes to reduce the number of police districts, with the aim of establishing more specialized environments, and more coordination between the police districts (Prop. 61 LS (2014–2015), 2015). However, the findings in this study indicate that there is a difference between coordination at the unit level, and across units in a police district and that different climates support and foster these different types of cooperation. Therefore, the results in this study indicate that the centralization of the police district by itself will not increase integration, as this is contingent on several conflicting values and climate types. Furthermore, external integration is positively correlated with open system climate, and therefore where external focus on flexibility is emphasized, higher levels of external integration will be valued and promoted in the organization. As such, the present study stressed the importance of differentiation.

Individual readiness to organizational change

The measurement of individual readiness to organizational change was adopted from Vakola (2014), and the Norwegian translation was assessed through internal reliability analysis and comparison to related construct. The results showed support for the refined version of the

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scale for the police members, with one item removed. Overall, the results indicated that the police members are strongly positive towards police change. Comparison to the climate dimensions gave additional support for the construct validity of the scale, with readiness for showing higher correlations with the open system climate, and lowest correlation with the human relations climate.

Limitations

There are several limitations of this study that needs to be acknowledged. In the next section, some of the most central limitations are presented.

Self reported surveys. The use of self-reported surveys in climate research represents the predominant methodology (Kuenzi & Schminke, 2009). This study relied upon a single source of data, namely surveys. The survey methodology has several well-know limitations, including same sources bias that can artificially inflate relationships (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), and problems associated with self-reported measures (Podsakoff & Organ, 1986; Schwarz, 1999). Particularly, social desirability and consistency bias may have been a problem in this particular study due to the presentation of coherent item set. However, as recommended by Podsakoff et al. (2003), several non-statistical measures were taken to try to reduce these problems, including ensuring participants anonymity, evaluation of pilot instrument by police members to increase comprehension and ensuring respondents that there are no right or wrong answers in the instructions. Furthermore, when appropriate, existing measurement instruments that had been empirically tested and validated were utilized. Additionally, new items were developed based on theory and conceptualizations of the target construct (Clark & Watson, 1995; DeVellis, 2012). Moreover, in order to try to increase face validity and construct validity of the measures, the initial items pool was reviewed by police members before administration. Lastly, multiple items were used to construct the measurement (Clark & Watson, 1995), and based on statistical analysis; only the items that met the set criteria were retained.

Sample size and external reliability. Another limitation is concerns the sample size of this study. There are several limitations related to the use of a sample with few participants. First of all, using a small sample size may yield less reliability of the obtained factor structure (Guadagnoli & Velicer, 1988; MacCallum et al., 2001; MacCallum et al., 1999). Consequently, the results obtained with a small sample may not be generalized to other samples of the population, or may not be confirmed with further studies.

An important part of scale development is to explore the dimensionality of an instrument, i.e. the latent construct underlying the different scales (Floyd & Widaman, 1995).

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Still, small sample size challenges the stability of the dimensionality as obtained through the factor analysis in this study, and therefore reduces the external reliability of these results (MacCallum et al., 2001; MacCallum et al., 1999). However, as the dimensionalities of the scale obtained in this study were consistent with theoretical assumptions, this may indicate that the results generalize beyond the study sample. Additionally, the mixed results of the CVF have been found to be an issue more generally with the use of normative Likert scales, as opposed to ipsative scales, and may therefore reflect a challenge beyond the sample size.

Level of measurement. The level of measurement concerns the content validity of the integration measure. The complexity of the police organization made the separation between external and internal integration difficult. Across the different police districts, diverse names of department, and local variations in the structural organization made it difficult to identify organizational level such that this would refer to the same in all districts. Therefore, there remains some uncertainty whether the data are measured the same organizational level across all districts. During the initial validation phase, a problem with the point of reference for the organizational level for all police district was identified. A possible way of approaching this problem may be to adjust each survey to the particular police district. However this would go at the expense of the external reliability of the findings, and the may reduce the possibility of comparing the results from different districts. This problem is prevalent in the climate research in general. In the present study this problem was approach by adopting a referent-shift model, and explicitly referencing each item to the organizational level. Additionally, the organizational level was explained both in the instructions, and by visualizing the levels in a simplified organizational map (see appendix F).

Consensual agreement. The limitation with perceptual or consensual agreement concerns the measurement of climate in this study. For climate to exist, a reasonable level of agreement or sharedness of perceptions of climate on the individual levels must be inferred (James et al., 2008; Kozlowski & Klein, 2000). However, in this study no formal assessment of climate was computed. Therefore, whether the results of this study represent police organizational climate, or individual perceptions of police climate (i.e. psychological climate) remains an open question. However, the aim of this study was not primarily to investigate police climate in itself, but to propose a new measurement of police climate. As such, this instrument is still in a development phase, and future studies are needed assessment of agreement can be analyzed, and support the aggregation of the data to the organizational level.

Implications

These findings have several practical and theoretical implications. First of all, this study represents a first step towards a tailoring approach to police reform. Secondly, this study gives support to the proposed integrated model towards organizational climate, and show how measuring climate from both a specific and general perspective, and at different organizational levels, can yield important information. Lastly, this study also provides some preliminary support for the Norwegian translation of the individual readiness to organizational change scale.

The finding of a balanced police climate perception may indicate that the police perceive pressure from several hold, and that their work environment is characterized by competing demands that they must prioritized between in their everyday work life. The results of the integration scale give clear implications for the police reform, and indicate that an important influence of organizational level for the sharing of information and competency. Lastly, individual readiness to organizational change, as measured in this study, indicates that the police members perceive more advantages than disadvantages to change. Overall, although this instrument is still in a development phase, this instrument may provide a useful way of strengthen the early phase of a change process in the police. Additionally, this instrument may provide an important tool for organizational development within the police.

Future research

A further development of this study would naturally follow the next step in a scale development process. This study establishes the initial development of the instrument, and preliminary results from a pilot sample. However, the results from this study gives mixed support for the proposed model for measuring global climate. For future research, recommendations include re-examination of the validity and reliability of the scale within a larger and more diverse, and representative sample from the Norwegian police. Additionally, because of the nomological mixed findings of the different climate types measure through CVF, future studies should examine the discriminant validity of the scales, and whether this is an appropriate theoretical framework for understanding police climate. Additionally, the inclusion of outcome variables from other sources than perceptual self-reports may strengthen the findings. As this study consisted of participants from a many different district, the assessment of climate agreement was not possible. As such, it remains a question whether this study investigate climate or individual climate perceptions, i.e. psychological climate. Further studies should therefore investigate climate by including several participant from one unit or

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district, and assess whether there exist a unit level, or if several sub climate may exist within the police.

From a practical standpoint, the findings suggest that the police organization should attend to the whole and complexity of the police organizational climate, as opposed to focusing on only one factor, or dimension of climate. Additionally, assessments of climate for integration should be differentiated according to organizational focus. Consequently, a clear shift in organizational focus through climate may be warranted if the police reform should increase and support integration within the districts, and not only at the unit level.

Conclusion

This study shows the potential usefulness of a police specific climate instrument. First of all, by combining general and content specific measures of climate, this instrument can yield more accurate information concerning how the police perceive their work environment. Secondly, this study found that the structural adjustment to integration is an important police specific modification that requires further attention. Additionally, the structural adjustment to integration showed that different climate fosters or impedes integration in the police. While further studies are needed, this instrument has the potential to become an important tool in a tailored approach to police reform (Yilmaz, 2013), as well as a tool for organizational development within the police.

References

- Arrindell, W. A., & van der Ende, J. (1985). An empirical test of the utility of the observations-to-variables ratio in factor and components analysis. *Applied Psychological Measurement*, 9(2), 165-178. doi: 10.1177/014662168500900205
- Bartlett, M. S. (1950). Tests of significance in factor analysis. *British Journal of statistical psychology*, 3(2), 77-85. doi: 10.1111/j.2044-8317.1950.tb00285.x
- Bernstrom, V. H., Lone, J. A., Bjorkli, C. A., Ulleberg, P., & Hoff, T. (2013). Assessing a Norwegian translation of the organizational climate measure. *Psychological Reports: Human Resources & Marketing*, 112(2), 390-407. doi: 10.2466/01.08.PR0.112.2.390-407
- Beus, J. M., Payne, S. C., Bergman, M. E., & Arthur, W. (2010). Safety climate and injuries: an examination of theoretical and empirical relationships. *Journal of Applied Psychology*, 95(4), 713-727. doi: 10.1037/a0019164
- Bouckenooghe, D., Devos, G., & Van den Broeck, H. (2009). Organizational change questionnaire—climate of change, processes, and readiness: development of a new instrument. *The Journal of psychology*, 143(6), 559-599. doi: 10.1080/00223980903218216
- Bowen, D. E., & Schneider, B. (2013). A service climate synthesis and future research agenda. *Journal of Service Research*, 17(1), 5-22. doi: 10.1177/1094670513491633
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185-216. doi: 10.1177/135910457000100301
- Browne, M. W., & Cudeck, R. (1992). Alternative Ways of Assessing Model Fit. *Sociological Methods & Research*, 21(2), 230-258. doi: 10.1177/0049124192021002005
- Bø, M. T. N. (2014). *Organizational climate differences in the Norwegian police*. (Master of Philosophy in Psychology Master Thesis), University of Oslo, Oslo.
- Cameron, K. S., & Quinn, R. (2011). *Diagnosing and changing organizational culture. based on the Competing Values Framework*. USA: John Wiley & Sons Inc.
- Cameron, K. S., Quinn, R. E., Degraff, J., & Thakor, A. V. (2006). *Competing values leadership: Creating value in organizations* (K. S. Cameron Ed.). UK: Edward Elgar Publishing Ltd.
- Campbell, J. P. (1977). On the nature of organizational effectivity. In P. S. Goodman & J. M. Pennings (Eds.), *New Perspectives on Organizational Effectiveness*. San Francisco: Jossey-Bass.

MEASURING POLICE CLIMATE

- Carr, J. Z., Schmidt, A. M., Ford, J. K., & DeShon, R. P. (2003). Climate perceptions matter: A meta-analytic path analysis relating molar climate, cognitive and affective states, and individual level work outcomes. *Journal of Applied Psychology, 88*(4), 605-619. doi: 10.1037/0021-9010.88.4.605
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research, 1*(2), 245-276. doi: 10.1207/s15327906mbr0102_10
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology, 83*(2), 234-246. doi: 10.1037/0021-9010.83.2.234
- Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment, 7*(3), 309-319. doi: 10.1037/1040-3590.7.3.309
- Colley, S. K., Lincolne, J., & Neal, A. (2013). An examination of the relationship amongst profiles of perceived organizational values, safety climate and safety outcomes. *Safety Science, 51*(1), 69-76. doi: 10.1016/j.ssci.2012.06.001
- COMPOSITE. (2014). Purpose of COMPOSITE. Retrieved 01.03.2015, from http://www.composite-project.eu/index.php/Purpose_en.html
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology, 78*(1), 98-104. doi: 10.1037/0021-9010.78.1.98
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*(4), 281-302. doi: 10.1037/h0040957
- Dawson, J. F., Gonzalez-Roma, V., Davis, A., & West, M. A. (2008). Organizational climate and climate strength in UK hospitals. *European Journal of Work and Organizational Psychology, 17*(1), 89-111. doi: 10.1080/13594320601046664
- Denison, D. R. (1996). What is the difference between organizational culture and organizational climate? A native's point of view on a decade of paradigm wars. *Academy of Management review, 21*(3), 619-654. doi: 10.5465/AMR.1996.9702100310
- Denison, D. R., Nieminen, L., & Kotrba, L. (2014). Diagnosing organizational cultures: A conceptual and empirical review of culture effectiveness surveys. *European Journal of Work and Organizational Psychology, 23*(1), 145-161. doi: 10.1080/1359432X.2012.713173
- DeVellis, R. D. (2012). *Scale Development: Theory and Applications* (3 ed.). Thousand Oaks, California: Sage Publications, Inc.

MEASURING POLICE CLIMATE

- Dickson, M. W., Resick, C. J., & Hanges, P. J. (2006). When organizational climate is unambiguous, it is also strong. *Journal of Applied Psychology, 91*(2), 351-364. doi: 10.1037/0021-9010.91.2.351
- Dietz, J., Pugh, S. D., & Wiley, J. W. (2004). Service climate effects on customer attitudes: an examination of boundary conditions. *Academy of Management Journal, 47*(1), 81-92. doi: 10.2307/20159561
- DIFI. (2013). Rapport 2013:3 Evaluering av Politidirektoratet [Report 2013:3 Evaluation of the Police Directorate]. Oslo: Direktoratet for forvaltning og IKT.
- Dillon, W. R., Kumar, A., & Mulani, N. (1978). Offending estimates in covariance structure analysis: Comments on the causes of and solutions to Heywood cases. *Psychological Bulletin, 101*(1), 126-135. doi: 10.1037/0033-2909.101.1.126
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological methods, 4*(3), 272-299. doi: 10.1037/1082-989X.4.3.272
- Fan, X., & Sivo, S. A. (2007). Sensitivity of fit indices to model misspecification and model types. *Multivariate Behavioral Research, 42*(3), 509-529. doi: 10.1080/00273170701382864
- Fjeld, C. M. (2013). *Organizational climate in police investigative work: A comparative analysis of police investigators and investigative trainers*. (Master of Work and Organizational Psychology Master thesis), University of Oslo, Oslo.
- Floyd, F. J., & Widaman, K. F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment, 7*(3), 286-299. doi: 10.1037/1040-3590.7.3.286
- Ghahramani, A., & Khalkhali, H. R. (in press). Development and validation of a safety climate scale for manufacturing industry. *Safety and Health at Work*. doi: 10.1016/j.shaw.2015.01.003
- Glick, W. H. (1985). Conceptualizing and measuring organizational and psychological climate: pitfalls of multilevel research. *Academy of Management review, 10*(3), 601-616. doi: 10.5465/AMR.1985.4279045
- Glomseth, P., Gottschalk, P., & Solli-Sæther, H. (2007). Occupational culture as determinant of knowledge sharing and performance in police investigations. *International Journal of the Sociology of Law, 35*, 96-107. doi: 10.1016/j.ijsl.2007.03.003

MEASURING POLICE CLIMATE

- González-Romá, V., Peiro, J. M., & Tordera, N. (2002). An examination of the antecedents and moderator influences of climate strength. *Journal of Applied Psychology, 87*(3), 465-473. doi: 10.1037//0021-9010.87.3.465
- Gregory, B. T., Harris, S. G., Armenakis, A. A., & Shook, C. L. (2009). Organizational culture and effectiveness: a study of values, attitudes, and organizational outcomes. *Journal of Business Research, 62*, 673. doi: 10.1016/j.jbusres.2008.05.021
- Guadagnoli, E., & Velicer, W. F. (1988). Relation to sample size to the stability of component patterns. *Psychological Bulletin, 103*(2), 265-275. doi: 10.1037/0033-2909.103.2.265
- Hair, J. F., Tatham, R. L., Anderson, R. E., & Black, W. (1998). *Multivariate data analysis* (5 ed.). New York, NY: Prentice-Hall.
- Hannevik, M. B., Lone, J. A., Bjørklund, R. A., Bjørkli, C. A., & Hoff, T. (2014). Organizational climate in large-scale projects in the oil and gas industry: A competing values perspective. *International Journal of Project Management, 32*(4), 687-697. doi: 10.1016/j.ijproman.2013.08.006
- Hartnell, C. A., Ou, A. Y., & Kinicki, A. (2011). Organizational culture and organizational effectiveness: A meta-analytic investigation of the Competing Values Framework's theoretical suppositions. *Journal of Applied Psychology, 96*(4), 677-694. doi: 10.1037/a0021987
- Hayton, J. C., Allen, D. G., & Scarpello, V. (2004). Factor retention decisions in exploratory factor Analysis: a tutorial on parallel analysis. *Organizational Research Methods, 7*(2), 191-205. doi: 10.1177/1094428104263675
- Heywood, H. B. (1931). On finite sequences of real numbers. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character, 134*(824), 486-501. doi: 10.2307/95855
- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika, 30*(2), 179-185. doi: 10.1007/BF02289447
- Humlegård, O. R. (2014). Det gode ved politikulturen [The good about the police culture]. *Norsk Politi*(3), 25.
- James, L. R., Choi, C. C., Ko, C. H. E., McNeil, P. K., Minton, M. K., Wright, M. A., & Kim, K. (2008). Organizational and psychological climate: a review of theory and research. *European Journal of Work and Organizational Psychology, 17*(1), 5-32. doi: 10.1080/13594320701662550
- James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. *Psychological Bulletin, 81*(12), 1096-1112. doi: 10.1037/h0037511

MEASURING POLICE CLIMATE

- Jung, T., Scott, T., Davies, H. T. O., Bower, P., Whalley, D., McNally, R., & Mannion, R. (2009). Instruments for exploring organizational culture: A review of the literature. *Public Administration Review*, 69(6), 1087-1096. doi: 10.1111/j.1540-6210.2009.02066.x
- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, 20(1), 141-151. doi: 10.1177/001316446002000116
- Kaiser, H. F. (1970). A second generation Little Jiffy. *Psychometrika*, 35(4), 401-415. doi: 10.1007/BF02291817
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36. doi: 10.1007/BF02291575
- Kalliath, T. J., Bluedorn, A. C., & Gillespie, D. F. (1999). A Confirmatory Factor Analysis of the Competing Values Instrument. *Educational and Psychological Measurement*, 59(1), 143-158. doi: 10.1177/0013164499591010
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2 ed.). New York: Wiley.
- Kimberly, J. R., & Quinn, R. E. (1984). *Managing organizational transitions*. Homewood, IL: Dow Jones-Irwin.
- Klein, K. J., Conn, A. B., Smith, D. B., & Sorra, J. S. (2001). Is everyone in agreement? An exploration of within-group agreement in employee perceptions of the work environment. *Journal of Applied Psychology*, 86(1), 3-16. doi: 10.1037//0021-9010.86.1.3
- Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research and methods in organizations: Foundations, extensions, and new directions* (pp. 3-90). San Francisco, CA: Jossey-Bass.
- Kuenzi, M. (2008). *An integrated model of work Climate*. (Doctoral dissertation), University of Central Florida, Orlando, Florida.
- Kuenzi, M., & Schminke, M. (2009). Assembling fragments into a lens: A review, critique, and proposed research agenda for the organizational work climate literature. *Journal of Management*, 35(3), 634-717. doi: 10.1177/0149206308330559
- Lamond, D. (2003). The value of Quinn's competing values model in an Australian context. *Journal of Managerial Psychology*, 18(1), 46-59. doi: 10.1108/02683940310459583

MEASURING POLICE CLIMATE

- LeBreton, J. M., & Senter, J. L. (2008). Answers to twenty questions about interrater reliability and interrater agreement. *Organizational Research Methods, 11*(4), 815-852. doi: 10.1177/1094428106296642
- Liao, H., & Rupp, D. E. (2005). The impact of justice climate and justice orientation on work outcomes: a cross-level multifoci framework. *Journal of Applied Psychology, 90*(2), 242-256. doi: 10.1037/0021-9010.90.2.242
- Lone, J. A., & Garnaas, A. (in review). Organizational climate and investigation performance in the Norwegian police: A qualitative Study. *Policing & Society*.
- Luria, G. (2008). Climate strength—how leaders form consensus. *The Leadership Quarterly, 19*, 42-53. doi: 10.1016/j.leaqua.2007.12.004
- MacCallum, R. C., Widaman, K. F., Preacher, K. J., & Hong, S. (2001). Sample size in factor analysis: The role of model error. *Multivariate Behavioral Research, 36*(4), 611-637. doi: 10.1207/S15327906MBR3604_06
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological methods, 4*(1), 84-99. doi: 10.1037/1082-989X.4.1.84
- Mullen, M. R. (1995). Diagnosing measurement equivalence in cross-national research. *Journal of International Business Studies, 26*(3), 573-596. doi: 10.1057/palgrave.jibs.8490187
- NOU 2012:14. (2012). *Rapport fra 22. juli-kommisjonen [Report from the 22nd of July Commission]* Retrieved from <https://www.regjeringen.no/contentassets/bb3dc76229c64735b4f6eb4dbfcdbfe8/nou/pdfs/nou201220120014000dddpdfs.pdf>
- NOU 2013:09. (2013). *Ett politi – rustet til å møte fremtidens utfordringer [One police - ready to face the challenges of the future]* Retrieved from <https://www.regjeringen.no/contentassets/5e2a1012dbc7449e8f57813e7822252b/nou/pdfs/nou201320130009000dddpdfs.pdf>
- Ostroff, C., & Schulte, M. (2014). A configural approach to the study of organizational culture and climate. In B. Schneider & K. M. Barbera (Eds.), *The Oxford Handbook of Organizational Climate and Culture* (pp. 532-552). Oxford: Oxford University Press.
- Parker, C. P., Baltes, B. B., Young, S. A., Huff, J. W., Altmann, R. A., LaCost, H. A., & Roberts, J. E. (2003). Relationships between psychological climate perceptions and work outcomes: a meta-analytic review. *Journal of organizational behavior, 24*(4), 389-416. doi: 10.1002/job.198

MEASURING POLICE CLIMATE

- Patterson, M. G., West, M. A., Shackleton, V. J., Dawson, J. F., Lawthom, R., Maitlis, S., & Wallace, A. M. (2005). Validating the organizational climate measure: links to managerial practices, productivity and innovation. *Journal of organizational behavior*, 26(4), 379-408. doi: 10.1002/job.312
- POD. (2014). *Tendenser i kriminaliteten: Utfordringer i Norge [Tendencies in crime: Challenges in Norway]* Retrieved from https://www.politi.no/vedlegg/lokale_vedlegg/politidirektoratet/Vedlegg_2560.pdf
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. doi: 10.1037/0021-9010.88.5.879
- Podsakoff, P. M., & Organ, D. W. (1986). Self-Reports in organizational research: problems and prospects. *Journal of Management*, 12(4), 531-544. doi: 10.1177/014920638601200408
- Politiet. (2014, 22.09.2014). Organisering av politi- og lensmannsetaten [The organization of the Police Service]. Retrieved 18.02.2015, from https://www.politi.no/om_politiet/organisasjon/
- Preacher, K. J., & MacCallum, R. C. (2002). Exploratory factor analysis in behavior genetics research: Factor recovery with small sample sizes. *Behavior Genetics*, 32(2), 153-161. doi: 10.1023/A:1015210025234
- Prop. 61 LS (2014–2015). (2015). *Endringer i politiloven mv. (trygghet i hverdagen – nærpolitireformen) [Changes in the police law (safety in everyday life - the local police reform)]*. Regjeringen Solberg: Oslo Retrieved from <https://www.regjeringen.no/contentassets/0f5847ca5bae4b2996b6441423e5ea09/no/pdfs/prp201420150061000dddpdfs.pdf>.
- Quinn, R. E. (1988). *Beyond rational management: Mastering the paradoxes and competing demands of high performance*. San Francisco, CA: Jossey-Bass.
- Quinn, R. E., & McGrath, M. R. (1982). Moving beyond the single-solution Perspective: The competing values approach as a diagnostic tool. *Journal of Applied Behavioral Science*, 8(5), 463-472. doi: 19.1177/002188638201800407
- Quinn, R. E., & McGrath, M. R. (1985). The transformation of organizational cultures: A competing values perspective. In P. J. Frost, L. F. Moore, M. R. Louis, C. C. Lundberg, & J. Martin (Eds.), *Organizational culture*. London: Sage.

MEASURING POLICE CLIMATE

- Quinn, R. E., & Rohrbaugh, J. (1981). A competing values approach to organizational effectiveness. *Public Productivity Review*, 5(2), 122-140. doi: 10.2307/3380029
- Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management science*, 29(3), 363-377. doi: 10.1287/mnsc.29.3.363
- Rafferty, A. E., & Jimmieson, N. L. (2010). Team change climate: a group-level analysis of the relationships among change information and change participation, role stressors, and well-being. *European Journal of Work and Organizational Psychology*, 19(5), 551-586. doi: 10.1080/13594320903007869
- Sass, D. A., & Schmitt, T. A. (2010). A comparative investigation of rotation criteria within exploratory factor analysis. *Multivariate Behavioral Research*, 45(1), 73-103. doi: 10.1080/00273170903504810
- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological methods*, 7(2), 147-177. doi: 10.1037/1082-989X.7.2.147
- Schein, E. H. (2010). *Organizational Culture and Leadership* (4 ed.). San Francisco: Jossey-Bass.
- Schneider, B. (1975). Organizational climates: an essay. *Personnel Psychology*, 28(4), 447-479. doi: 10.1111/j.1744-6570.1975.tb01386.x
- Schneider, B. (1990). The climate for service: An application of the climate construct. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 383-412). San Francisco: Jossey-Bass.
- Schneider, B., & Barbera, K. M. (2014). *The Oxford Handbook of Organizational Climate and Culture* (B. Schneider & K. M. Barbera Eds.). Oxford: Oxford University Press.
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2011). Organizational climate research: Achievements and the road ahead. In N. M. Ashkanasy, C. P. M. Wilderom, & M. F. Peterson (Eds.), *The handbook of organizational culture and climate* (2 ed., pp. 29-49). Thousand Oaks, CA: Sage.
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. *Annual Review of Psychology*, 64(1), 361-388. doi: 10.1146/annurev-psych-113011-143809
- Schneider, B., Macey, W. H., & Young, S. A. (2006). The climate for service. *Journal of Relationship Marketing*, 5(2-3), 111-132. doi: 10.1300/J366v05n02_07
- Schneider, B., & Reichers, A. E. (1983). On the etiology of climates. *Personnel Psychology*, 36, 19-39. doi: 10.1111/j.1744-6570.1983.tb00500.x

MEASURING POLICE CLIMATE

- Schneider, B., Salvaggio, A. N., & Subirats, M. (2002). Climate strength: a new direction for climate research. *Journal of Applied Psychology, 87*(2), 220-229. doi: 10.1037//0021-9010.87.2.220
- Schwartz, H., & Davis, S. M. (1981). Matching corporate culture and business strategy. *Organizational Dynamics, 10*(1), 30-48. doi: 10.1016/0090-2616(81)90010-3
- Schwarz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist, 54*(2), 93-105. doi: 10.1037/0003-066X.54.2.93
- Silva, S., Lima, M. L., & Baptista, C. (2004). OSCI: an organisational and safety climate inventory. *Safety Science, 42*, 205-220. doi: 10.1016/S0925-7535(03)00043-2
- Sowinski, D. R., Fortmann, K. A., & Lezotte, D. V. (2008). Climate for service and the moderating effects of climate strength on customer satisfaction, voluntary turnover, and profitability. *European Journal of Work and Organizational Psychology, 17*(1), 73 – 88. doi: 10.1080/13594320701473065
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5 ed.). Boston: Pearson Education.
- Thumin, F. J., & Thumin, L. J. (2011). The measurement and interpretation of organizational climate. *The Journal of psychology, 145*(2), 93-109. doi: 10.1080/00223980.2010.538754
- Thurstone, L. L. (1947). *Multiple-factor analysis*. Chicago: The University of Chicago Press.
- Vakola, M. (2014). What's in there for me? Individual readiness to change and the perceived impact of organizational change. *Leadership & Organization Development Journal, 35*(3), 195-209. doi: 10.1108/LODJ-05-2012-0064
- van de Vijver, F., & Hambleton, R. K. (1996). Translating tests: some practical guidelines. *European Psychologist, 1*(2), 89-99. doi: 10.1027/1016-9040.1.2.89
- van den Born, A., van Witteloostuijn, A., Barlage, M., Sapulete, S., van den Oord, A., Rogiest, S., . . . Pólos, L. (2013). Policing opportunities and threats in Europe. *Journal of Organizational Change Management, 26*(5), 811-829. doi: 10.1108/JOCM-09-2012-0145
- Verbeke, W., Volgering, M., & Hessels, M. (1998). Exploring the conceptual expansion within the field of organizational behaviour: organizational climate and organizational culture. *Journal of Management Studies, 35*(3), 303-329. doi: 10.1111/1467-6486.00095

MEASURING POLICE CLIMATE

- Wilcox, J. B., Bellenger, D. N., & Rigdon, E. E. (1994). Assessing sample representativeness in industrial surveys. *Journal of Business & Industrial Marketing*, 9(2), 51-61. doi: 10.1108/08858629410059834
- Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content Analysis and Recommendations for best practices. *Counseling Psychologist*, 34(6), 806-838. doi: 10.1177/0011000006288127
- Yang, J., Mossholder, K. W., & Peng, T. K. (2007). Procedural justice climate and group power distance: an examination of cross-level interaction effects. *Journal of Applied Psychology*, 92(3), 681–692. doi: 10.1037/0021-9010.92.3.681
- Yilmaz, S. (2013). Tailoring model in reforming police organizations towards community policing. *Journal of Organizational Change Management*, 26(5), 897-924. doi: 10.1108/JOCM-07-2012-0092
- Zohar, D. (2000). A group level model of safety climate: testing the effect of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology*, 85(4), 587-596. doi: 10.1037//0021-9010.85.4.587
- Zohar, D. (2010). Thirty years of safety climate research: Reflections and future directions. *Accident Analysis & Prevention*, 42(5), 1517-1522. doi: 10.1016/j.aap.2009.12.019
- Zohar, D., & Luria, G. (2005). A multi-level model of safety climate: cross-level relationships between organization and group-level climates. *Journal of Applied Psychology*, 90(4), 616–628. doi: 10.1037/0021-9010.90.4.616

Appendix A: Instrument item numbers and labels

Description of the scales and items labels in the police climate instrument. Reversed items are marked with an asterix (*), and reversed before conducting the analysis. Response scale ranges from: 1 = “Definitely false” (Norwegian: “Helt feil”) to 5 “Definitively true” (Norwegian “Helt riktig”), with a neutral response 3 = “Neither agree nor disagree” (Norwegian “Verken eller”).

Global climate scale

Human relations climate

- Q1 Vi utvikler støttende, positive arbeidsforhold her på enheten
- Q2 Arbeidsmiljøet er sånn at vi på enheten kommer godt overens med hverandre
- Q3 Vi har lite konflikt mellom oss på enheten
- Q4 Vi er forpliktet til hverandre her på enheten
- Q5 Det er høy moral blant ansatte på enheten
- Q6 På min enhet hjelper vi ansatte hverandre når det trengs
- Q7 Hver ansatt har muligheter for utvikling her på enheten

Internal Process climate

- Q8 Regler og retningslinjer er tydelig kommunisert til oss her på enheten
- Q9 Etablerte prosedyrer og retningslinjer styrer generelt hvordan vi løser våre arbeidsoppgaver her på enheten
- Q10 Vi på enheten blir oppfordret til å følge vår stillingsinstruks/stillingsbeskrivelse
- Q11 Vi på enheten passer på at arbeidsoppgaver er organisert og forutsigbare
- Q12 Vi er kjent for å gjøre jobben vår effektivt her på enheten
- Q13 Vi utfører arbeid som alltid er av høy standard her på enheten
- Q14 Vi jobber for å oppnå maks effektivitet her på enheten

Open system climate

- Q15 På denne enheten er vi i stand til å tilpasse oss nye krav når de oppstår
- Q16 Vi er fleksible nok til å ta på oss nye oppgaver etter hvert som de oppstår her på enheten
- Q17 Endring blir godt tatt i mot på denne enheten
- Q18 Vi er i stand til å gjøre endringer på driftsrutiner som kreves her på enheten

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- Q19 Vi er alltid klare for å ta tak i nye utfordringer her på enheten
- Q20 På min enhet er vi opptatt av å holde oss oppdatert med utviklingen i samfunnet
- Q21 Vi blir oppmuntret til å finne nye løsninger på problemer her på enheten

Rational goal climate

- Q22 Det er viktig for oss på enheten å nå våre satte mål
- Q23 Vi legger vekt på å sette mål for enheten
- Q24 Det er viktig at vi på enheten planlegger for fremtiden
- Q25 Vi her på enheten har alltid planer om å gjøre forbedringer
- Q26 Vi blir belønnet for å nå mål her på enheten
- Q27 Vi her på enheten leter etter nye måter å gjøre ting på
- Q28 På min enhet er vi kjent med de langsiktige planene og retningen for Politiet

Integration scale

Internal integration

- Q1 Folk er innstilt på å dele informasjon på tvers av gruppene her på enheten
- Q2 Det er svært lite konflikt mellom gruppene her på enheten
- Q3 Folk er mistenksomme overfor andre grupper her på enheten*
- Q4 Det er svært effektivt samarbeid mellom gruppene her på enheten
- Q5 Det er lite respekt mellom noen av gruppene her på enheten*
- Q6 Folk er svært innstilt på å dele på kompetanse mellom gruppene her på enheten
- Q7 Folk er svært innstilte på å dele på personer med fagkompetanse/kompetansepersoner mellom gruppene her på enheten
- Q8 Det er mye konflikt om deling av kompetanse mellom gruppene på denne enheten*
- Q9 Det er effektiv deling av informasjon på tvers av gruppene her på enheten
- Q10 Her deler vi mye informasjon på tvers av gruppene på enheten
- Q11 Det er stor grad av samarbeid mellom gruppene her på enheten
- Q12 Folk er innstilte på å samarbeide på tvers av gruppene her på enheten

External integration climate

- Q13 Folk er innstilt på å dele informasjon på tvers av enhetene her i distriktet

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- Q14 Det er svært lite konflikt mellom enhetene her i distriktet
- Q15 Folk er mistenksomme overfor andre enheter her i distriktet*
- Q16 Det er svært effektivt samarbeid mellom enhetene her i distriktet
- Q17 Det er lite respekt mellom noen av enhetene her i distriktet*
- Q18 Folk er svært innstilte på å dele på kompetanse mellom enhetene her i distriktet
- Q19 Folk er svært innstilte på å dele på personer med fagkompetanse/kompetansepersoner mellom enhetene her i distriktet
- Q20 Det er mye konflikt om deling av kompetanse mellom enhetene her i distriktet*
- Q21 Det er effektiv deling av informasjon på tvers av enhetene her i distriktet
- Q22 Her deler vi mye informasjon på tvers av enhetene i distriktet
- Q23 Det er stor grad av samarbeid mellom enhetene her i distriktet
- Q24 Folk er innstilte på å samarbeide på tvers av enhetene her i distriktet

Individual readiness to organizational change

- Q1 Når endringer skjer på min enhet tror jeg at jeg er klar for å takle dem
- Q2 Jeg prøver vanligvis å overbevise folk på min enhet om å akseptere endring
- Q3 Når endringer skjer på min enhet pleier jeg å klage på dem heller enn å gjøre noe med dem
- Q4 Jeg tror at jeg er mer klar for å akseptere endring enn mine kollegaer på min enhet
- Q5 Jeg er ikke bekymret for endringer på min enhet fordi jeg tror at det er en måte å takle dem på
- Q6 Når endringer skjer på min enhet har jeg stort sett til hensikt å støtte dem

Appendix B: Correlation matrix for the global climate scale

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28									
Q1	1																																				
Q2	.564*	1																																			
Q3	.509*	.577*	1																																		
Q4	.546*	.395*	.493*	1																																	
Q5	.433*	.408*	.477*	.460*	1																																
Q6	.462*	.479*	.467*	.552*	.501**	1																															
Q7	.422*	.368*	.309*	.297*	.272**	.425*	1																														
Q8	.399*	.155*	.271*	.440*	.285**	.346*	.424*	1																													
Q9	.312*	.127	.210*	.271*	.255**	.182*	.192*	.444*	1																												
Q10	.294*	.124	.073	.314*	.157*	.204*	.261*	.277*	.327*	1																											
Q11	.317*	.144*	.160*	.179*	.209**	.289*	.364*	.424*	.353*	.383**	1																										
Q12	.354*	.134	.232*	.352*	.287**	.268*	.197*	.339*	.333*	.237**	.360**	1																									
Q13	.431*	.341*	.280*	.366*	.441**	.430*	.290*	.299*	.137	.251**	.289**	.412*	1																								
Q14	.305*	.087	.211*	.360*	.316**	.365*	.288*	.396*	.223**	.345**	.337**	.374*	.412*	1																							
Q15	.398*	.329*	.322*	.353*	.255**	.495*	.388*	.357*	.258**	.223**	.278**	.359*	.311*	.361*	1																						
Q16	.307*	.186*	.225*	.332*	.282**	.487*	.294*	.271*	.195**	.138	.194**	.344*	.274*	.339*	.626*	1																					
Q17	.392*	.208*	.251*	.414*	.254**	.392*	.348*	.374*	.220**	.267**	.293**	.348*	.323*	.298*	.534*	.487*	1																				
Q18	.376*	.199*	.254*	.413*	.257**	.384*	.361*	.455*	.314**	.266**	.280**	.347*	.297*	.309*	.462*	.537*	.547**	1																			
Q19	.314*	.200*	.138	.288*	.291**	.372*	.209*	.243*	.171*	.168*	.239**	.282*	.408*	.303*	.534*	.572*	.521**	.459*	1																		
Q20	.515*	.160*	.180*	.373*	.258**	.396*	.350*	.399*	.253**	.330**	.296**	.381*	.387*	.409*	.409*	.359*	.414**	.441*	.374*	1																	
Q21	.428*	.100	.145*	.381*	.228**	.347*	.391*	.429*	.257**	.292**	.278**	.341*	.399*	.480*	.364*	.405*	.473**	.482*	.429*	.585*	1																
Q22	.295*	.078	.098	.318*	.340**	.235*	.311*	.300*	.194**	.242**	.231**	.341*	.269*	.266*	.229*	.241*	.220**	.314*	.278*	.408*	.452*	1															
Q23	.278*	.101	.152*	.298*	.204**	.233*	.306*	.313*	.202**	.311**	.220**	.242*	.130	.365*	.235*	.158*	.292**	.261*	.231*	.388*	.371*	.587*	1														
Q24	.338*	.065	.175*	.350*	.305**	.355*	.235*	.310*	.225**	.184*	.211**	.267*	.226*	.321*	.196*	.140	.314**	.229*	.157*	.421*	.433*	.305*	.402*	1													
Q25	.391*	.150*	.150*	.368*	.246**	.256*	.321*	.282*	.178*	.276**	.203**	.301*	.230*	.269*	.218*	.264*	.305**	.342*	.309*	.430*	.435*	.470*	.297*	.469*	1												
Q26	.268*	.038	.099	.266*	.156*	.160*	.267*	.221*	.194**	.260**	.146*	.223*	.231*	.238*	.187*	.288*	.300**	.258*	.308*	.286*	.433*	.290*	.213*	.186*	.337*	1											
Q27	.405*	.190*	.220*	.431*	.264**	.389*	.330*	.326*	.222**	.269**	.232**	.345*	.286*	.358*	.433*	.368*	.504**	.422*	.427*	.512*	.518*	.357*	.317*	.429*	.601*	.366*	1										
Q28	.209*	.052	.042	.239*	.248**	.286*	.233*	.387*	.304**	.213**	.335**	.270*	.219*	.253*	.178*	.173*	.317**	.271*	.202*	.359*	.353*	.260*	.303*	.333*	.212*	.369*	.304*	1									

** Correlation is significant at the $p < .01$ level. * Correlation is significant at $p < .01$ level.

Appendix C: Correlation matrix for the integration scale

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24		
Q1	1																									
Q2	.525**	1																								
Q3	.325**	.509**	1																							
Q4	.432**	.447**	.327**	1																						
Q5	.426**	.560**	.560**	.458**	1																					
Q6	.595**	.450**	.276**	.585**	.452**	1																				
Q7	.394**	.437**	.251**	.540**	.314**	.594**	1																			
Q8	.386**	.544**	.444**	.372**	.567**	.440**	.367**	1																		
Q9	.495**	.436**	.374**	.631**	.428**	.545**	.432**	.427**	1																	
Q10	.500**	.382**	.344**	.481**	.354**	.524**	.439**	.297**	.671**	1																
Q11	.510**	.412**	.277**	.665**	.411**	.579**	.402**	.433**	.631**	.664**	1															
Q12	.476**	.459**	.291**	.536**	.494**	.557**	.421**	.530**	.477**	.485**	.731**	1														
Q13	.229**	.149*	.107	.230**	.167*	.319**	.321**	.086	.250**	.321**	.200**	.266**	1													
Q14	.146*	.149*	.128	.128	.141	.206**	.179*	.165*	.126	.181*	.158*	.245**	.375**	1												
Q15	.037	.122	.200**	.054	.225**	.045	.117	.247**	.040	-.039	.066	.132	.199**	.431**	1											
Q16	.215**	.144*	.215**	.284**	.192**	.306**	.317**	.138	.218**	.236**	.244**	.237**	.357**	.387**	.257**	1										
Q17	.281**	.231**	.274**	.150*	.329**	.221**	.181*	.266**	.187*	.270**	.298**	.376**	.376**	.574**	.596**	.402**	1									
Q18	.273**	.174*	.140	.309**	.123	.354**	.347**	.191**	.278**	.347**	.292**	.335**	.595**	.428**	.195**	.504**	.391**	1								
Q19	.229**	.172*	.168*	.299**	.089	.267**	.424**	.160*	.327**	.392**	.283**	.277**	.512**	.427**	.150*	.508**	.372**	.600**	1							
Q20	.273**	.247**	.244**	.207**	.271**	.201**	.270**	.360**	.200**	.247**	.229**	.299**	.357**	.351**	.306**	.282**	.482**	.423**	.444**	1						
Q21	.271**	.154*	.188*	.287**	.184*	.322**	.262**	.096	.469**	.436**	.358**	.304**	.562**	.411**	.207**	.456**	.431**	.540**	.524**	.290**	1					
Q22	.211**	.164*	.099	.257**	.103	.294**	.295**	.171*	.320**	.412**	.330**	.326**	.545**	.516**	.247**	.519**	.402**	.559**	.584**	.364**	.651**	1				
Q23	.208**	.215**	.167*	.325**	.143	.296**	.324**	.249**	.295**	.298**	.390**	.347**	.389**	.433**	.232**	.575**	.368**	.542**	.580**	.345**	.494**	.721**	1			
Q24	.186*	.209**	.181*	.280**	.156*	.307**	.220**	.187*	.262**	.245**	.275**	.381**	.414**	.440**	.270**	.496**	.472**	.516**	.477**	.313**	.399**	.496**	.640**	1		

** Correlation is significant at the $p < .01$ level, * Correlation is significant at the $p < .05$ level

Appendix D: Alternative factor solution for global climate

Pattern and structure matrix for the 3-factor exploratory FA with ML direct oblimin (delta = 0) for the global climate scale, with highest loading on factor is marked in bold in the pattern matrix.

	Pattern Matrix			H ²	Structure Matrix		
	1	2	3		1	2	3
Q24: Det er viktig at vi på enheten planlegger for fremtiden	.663	-.054	.152	.378	.602	-.266	-.232
Q21: Vi blir oppmuntret til å finne nye løsninger på problemer her på enheten	.650	.105	-.233	.578	.734	-.256	-.546
Q22: Det er viktig for oss på enheten å nå våre satte mål	.646	.044	.032	.375	.610	-.209	-.303
Q23: Vi legger vekt på å sette mål for enheten	.631	.010	.092	.339	.577	-.213	-.249
Q25: Vi her på enheten har alltid planer om å gjøre forbedringer	.616	-.010	-.002	.386	.622	-.264	-.343
Q20: På min enhet er vi opptatt av å holde oss oppdatert med utviklingen i samfunnet	.608	-.019	-.161	.514	.704	-.333	-.500
Q28: På min enhet er vi kjent med de langsiktige planene og retningen for Politiet	.537	.062	-.004	.268	.514	-.161	-.273
Q27: Vi her på enheten leter etter nye måter å gjøre ting på	.514	-.022	-.242	.473	.655	-.331	-.532
Q8: Regler og retningslinjer er tydelig kommunisert til oss her på enheten	.491	-.142	-.073	.372	.590	-.374	-.398
Q10: Vi på enheten blir oppfordret til å følge vår stillingsinstruks/ stillingsbeskrivelse	.473	-.038	.030	.224	.472	-.220	-.243
Q14: Vi jobber for å oppnå maks effektivitet her på enheten	.453	-.040	-.166	.337	.560	-.293	-.430
Q26: Vi blir belønnet for å nå mål her på enheten	.429	.102	-.153	.242	.471	-.137	-.347
Q11: Vi på enheten passer på at arbeidsoppgaver er organisert og forutsigbare	.382	-.094	-.062	.218	.454	-.276	-.308
Q12: Vi er kjent for å gjøre jobben vår effektivt her på enheten	.373	-.083	-.187	.295	.509	-.312	-.424
Q9: Etablerte prosedyrer og retningslinjer styrer generelt hvordan vi løser våre arbeidsoppgaver her på enheten	.356	-.115	-.022	.185	.415	-.271	-.263
Q7: Hver ansatt har muligheter for utvikling her på enheten	.307	-.291	-.108	.325	.485	-.460	-.392
Q2: Arbeidsmiljøet er sånn at vi på enheten kommer godt overens med hverandre	-.184	-.842	-.018	.624	.172	-.773	-.256

MEASURING POLICE CLIMATE

Continued

Q3: Vi har lite konflikt mellom oss på enheten	-.072	-.784	.005	.570	.248	-.752	-.271
Q1: Vi utvikler støttende, positive arbeidsforhold her på enheten	.333	-.573	-.005	.600	.571	-.712	-.417
Q5: Det er høy moral blant ansatte på enheten	.186	-.523	-.009	.395	.407	-.604	-.322
Q6: På min enhet hjelper vi ansatte hverandre når det trengs	.089	-.501	-.304	.540	.461	-.660	-.554
Q4: Vi er forpliktet til hverandre her på enheten	.329	-.472	-.057	.504	.554	-.630	-.426
Q13: Vi utfører arbeid som alltid er av høy standard her på enheten	.249	-.304	-.156	.322	.459	-.469	-.414
Q16: Vi er fleksible nok til å ta på oss nye oppgaver etter hvert som de oppstår her på enheten	-.095	-.011	-.863	.670	.381	-.319	-.815
Q15: På denne enheten er vi i stand til å tilpasse oss nye krav når de oppstår	-.039	-.180	-.703	.595	.419	-.447	-.754
Q19: Vi er alltid klare for å ta tak i nye utfordringer her på enheten	.068	.032	-.690	.514	.432	-.274	-.715
Q17: Endring blir godt tatt i mot på denne enheten	.235	-.046	-.522	.492	.539	-.353	-.669
Q18: Vi er i stand til å gjøre endringer på driftsrutiner som kreves her på enheten	.252	-.042	-.499	.477	.541	-.346	-.653

Extraction Method: Maximum Likelihood.

Rotation Method: Oblimin with Kaiser Normalization.

Rotation converged in 6 iterations. Factor loadings >.4 are boldfaced.

Appendix E: Alternative factor solution for integration

Pattern and structure matrix for the 3-factor exploratory FA with ML direct oblimin (delta = 0) for the integration scale, with highest loading on factor is marked in bold in the pattern matrix.

	Pattern Matrix			H ²	Structure Matrix		
	1	2	3		1	2	3
Q11: Det er stor grad av samarbeid mellom gruppene her på enheten	.742	.128	-.187	.645	.775	.410	-.096
Q5: Det er lite respekt mellom noen av gruppene her på enheten (R)	.732	-.174	.312	.595	.693	.158	.369
Q4: Det er svært effektivt samarbeid mellom gruppene her på enheten	.715	.089	-.199	.578	.731	.358	-.115
Q9: Det er effektiv deling av informasjon på tvers av gruppene her på enheten	.712	.130	-.242	.615	.740	.393	-.154
Q2: Det er svært lite konflikt mellom gruppene her på enheten	.707	-.105	.162	.496	.681	.199	.224
Q6: Folk er svært innstilt på å dele på kompetanse mellom gruppene her på enheten	.695	.126	-.142	.566	.732	.393	-.056
Q12: Folk er innstilte på å samarbeide på tvers av gruppene her på enheten	.681	.130	.032	.559	.737	.410	.117
Q8: Det er mye konflikt om deling av kompetanse mellom gruppene på denne enheten (R)	.668	-.104	.278	.510	.654	.198	.336
Q1: Folk er innstilt på å dele informasjon på tvers av gruppene her på enheten	.661	.031	-.036	.451	.670	.296	.036
Q10: Her deler vi mye informasjon på tvers av gruppene på enheten	.611	.242	-.273	.577	.681	.461	-.183
Q3: Folk er mistenksomme overfor andre grupper her på enheten (R)	.539	-.076	.269	.362	.536	.173	.317
Q7: Folk er svært innstilte på å dele på personer med fagkompetanse/kompetansepersoneer mellom gruppene her på enheten	.515	.207	-.113	.390	.587	.404	-.037
Q22: Her deler vi mye informasjon på tvers av enhetene i distriktet	-.025	.840	-.057	.682	.311	.824	.032
Q23: Det er stor grad av samarbeid mellom enhetene her i distriktet	.046	.747	-.010	.586	.348	.764	.076

MEASURING POLICE CLIMATE

Continued

Q19: Folk er svært innstilte på å dele på personer med fagkompetanse/ kompetansepersoner mellom enhetene her i distriktet	.024	.745	-.078	.563	.319	.746	.006
Q18: Folk er svært innstilte på å dele på kompetanse mellom enhetene her i distriktet	.042	.729	-.027	.554	.336	.743	.057
Q21: Det er effektiv deling av informasjon på tvers av enhetene her i distriktet	.090	.699	-.088	.540	.365	.726	-.002
Q13: Folk er innstilt på å dele informasjon på tvers av enhetene her i distriktet	.014	.653	-.011	.433	.278	.658	.061
Q16: Det er svært effektivt samarbeid mellom enhetene her i distriktet	.025	.633	.077	.431	.290	.651	.148
Q24: Folk er innstilte på å samarbeide på tvers av enhetene her i distriktet	.047	.633	.129	.463	.318	.666	.203
Q14: Det er svært lite konflikt mellom enhetene her i distriktet	-.076	.608	.340	.493	.206	.614	.398
Q20: Det er mye konflikt om deling av kompetanse mellom enhetene her i distriktet (R)	.158	.385	.298	.346	.345	.482	.357
Q15: Folk er mistenksomme overfor andre enheter her i distriktet (R)	-.030	.273	.622	.489	.146	.329	.649
Q17: Det er lite respekt mellom noen av enhetene her i distriktet (R)	.110	.470	.533	.626	.357	.573	.595

Extraction Method: Maximum Likelihood.

Rotation Method: Oblimin with Kaiser Normalization.

Rotation converged in 15 iterations.

Appendix F: The police climate questionnaire (in Norwegian)

Undersøkelse av organisasjonsklima for endring i Politiet

Instruksjon:

I dette spørreskjemaet blir du bedt om å vurdere ulike sider ved ditt arbeidsmiljø. På de neste sidene finner du en rekke spørsmål og utsagn som vi ber deg ta stilling til. Spørreskjemaet er delt inn i 4 deler. Første del er om bakgrunnsinformasjon. Andre del handler om ditt arbeidsmiljø. Tredje del handler om samarbeid internt og eksternt. Fjerde og siste del handler om hvordan du opplever organisasjonsendringer.

Det finnes ingen ”rette” eller ”gale” svar. Vi er her interessert i dine opplevelser og vurderinger. Dersom ingen av svaralternativene passer, krysser du av for det svaralternativet som passer best for deg.

For at spørreskjemaet skal gi et representativt og gyldig bilde av din organisasjon er det viktig at du svarer på alle spørsmålene. Velg svaralternativ ved å sette kryss eller hake. Kyss kun av ett alternativ for hver påstand. Dersom du har noen kommentarer, skriv dette inn i kommentarfeltet under hver del.

Skriver du feil, sverter du ut svaret som ikke gjelder slik: ■

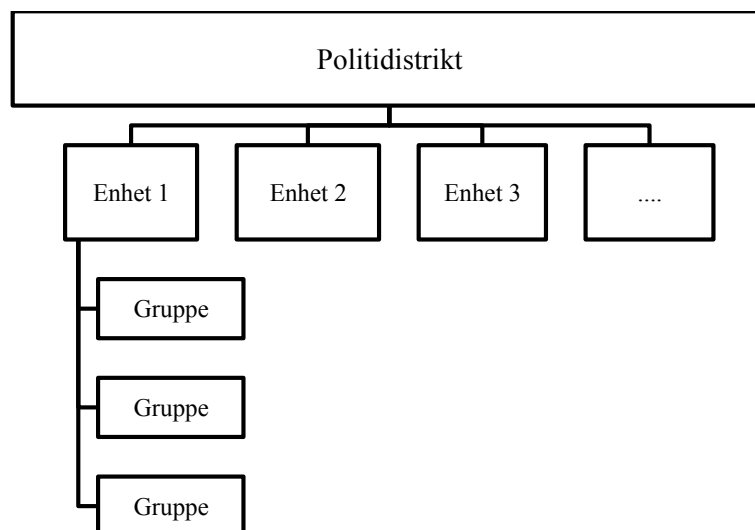
Forklaring av svaralternativene:

Helt feil	Ganske feil	Verken eller	Ganske riktig	Helt riktig
Påstanden stemmer absolutt ikke med din oppfatning/erfaring.	Påstanden er som regel feil, men ikke alltid.	Påstanden er verken riktig eller feil ut i fra din oppfatning/erfaring.	Påstanden stemmer ofte, men ikke alltid.	Påstanden stemmer absolutt med din oppfatning/erfaring.

Forklaring av begreper:

Her har vi valgt ordene ”grupper” og ”enheter” for å beskrive to ulike nivå i Politidistriktene. Velg det som tilsvarer disse nivåene hos deg når du svarer på spørsmålene på de neste sidene.

Grupper	Din grupper er den gruppen kollegaer du primært jobber med, ikke geografisk enhet eller driftsenhet. Flere grupper utgjør en enhet, og din gruppe er del av denne enheten. Med grupper menes altså her de ulike gruppene som er på en enhet (f.eks. avdelinger, team).
Enheter	Med enheter menes alle enhetene i ditt politidistrikt, for eksempel politistasjon eller fagenheter. En enhet består av ulike underordnede grupper. Din enhet er den enheten gruppen din hører til.
Internt samarbeid	Samarbeidet på din enhet, mellom de ulike gruppene på enheten.
Eksternt samarbeid	Samarbeid mellom alle enhetene i politidistriktet.



Bakgrunnsinformasjon

1 Kjønn

- Kvinne Mann

2 Aldersgruppe

- 23 år eller yngre 24-26 år 27-29 år 30-32 år
 33-35 år 36-38 år 39-41 år 42-44 år
 45-47 år 48-50 år 51-53 år 54 år eller eldre

3 Fagområde. Hvilket fagområde jobber du hovedsakelig med?

- Etterforskning Forebyggende Operativ Påtale
 Annet. Vennligst spesifiser: _____

4 Ansettelsestid. Hvor lenge har du jobbet i Politiet?

- Under 1 år 1-5 år 6-10 år 11-15 år
 16-20 år 21-25 år 26-30 år 31 år eller mer

5 Politidistrikt. Hvilket politidistrikt jobber du ved?

- | | | |
|--|--|--|
| <input type="checkbox"/> Agder | <input type="checkbox"/> Nordmøre og Romsdal | <input type="checkbox"/> Sør-Trøndelag |
| <input type="checkbox"/> Asker og Bærum | <input type="checkbox"/> Nordre Buskerud | <input type="checkbox"/> Telemark |
| <input type="checkbox"/> Follo | <input type="checkbox"/> Oslo | <input type="checkbox"/> Troms |
| <input type="checkbox"/> Gudbrandsdal. | <input type="checkbox"/> Rogaland | <input type="checkbox"/> Vestfinnmark |
| <input type="checkbox"/> Haugaland | <input type="checkbox"/> Romerike | <input type="checkbox"/> Vestfold |
| <input type="checkbox"/> Hedmark | <input type="checkbox"/> Salten | <input type="checkbox"/> Vestoppland |
| <input type="checkbox"/> Helgeland | <input type="checkbox"/> Sogn og Fjordane | <input type="checkbox"/> Østfinnmark |
| <input type="checkbox"/> Hordaland | <input type="checkbox"/> Sunnmøre | <input type="checkbox"/> Østfold |
| <input type="checkbox"/> Midtre Hålogaland | <input type="checkbox"/> Søndre Buskerud | |
| <input type="checkbox"/> Nord-Trøndelag | | |

6 Beskrivelse av *din* enhet

Du får nå en rekke påstander om din arbeidsplass, altså den enheten du jobbet ved. Velg det svaralternativet som passer best for hvordan du opplever dette.

Her på enheten:	<i>Helt feil</i>	<i>Ganske feil</i>	<i>Verken eller</i>	<i>Ganske riktig</i>	<i>Helt riktig</i>
Vi utvikler støttende, positive arbeidsforhold her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arbeidsmiljøet er sånn at vi på enheten kommer godt overens med hverandre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi har lite konflikt mellom oss på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi er forpliktet til hverandre her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er høy moral blant ansatte på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
På min enhet hjelper vi ansatte hverandre når det trengs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hver ansatt har muligheter for utvikling her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regler og retningslinjer er tydelig kommunisert til oss her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Etablerte prosedyrer og retningslinjer styrer generelt hvordan vi løser våre arbeidsoppgaver her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi på enheten blir oppfordret til å følge vår stillingsinstruks/stillingsbeskrivelse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6 Beskrivelse av *din* enhet

	<i>Helt feil</i>	<i>Ganske feil</i>	<i>Verken eller</i>	<i>Ganske riktig</i>	<i>Helt riktig</i>
Vi på enheten passer på at arbeidsoppgaver er organisert og forutsigbare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi er kjent for å gjøre jobben vår effektivt her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi utfører arbeid som alltid er av høy standard her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi jobber for å oppnå maks effektivitet her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
På denne enheten er vi i stand til å tilpasse oss nye krav når de oppstår	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi er fleksible nok til å ta på oss nye oppgaver etter hvert som de oppstår her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Endring blir godt tatt i mot på denne enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi er i stand til å gjøre endringer på driftsrutiner som kreves her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi er alltid klare for å ta tak i nye utfordringer her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
På min enhet er vi opptatt av å holde oss oppdatert med utviklingen i samfunnet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi blir oppmuntret til å finne nye løsninger på problemer her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6 Beskrivelse av *din* enhet

	<i>Helt feil</i>	<i>Ganske feil</i>	<i>Verken eller</i>	<i>Ganske riktig</i>	<i>Helt riktig</i>
Det er viktig for oss på enheten å nå våre satte mål	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi legger vekt på å sette mål for enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er viktig at vi på enheten planlegger for fremtiden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi her på enheten har alltid planer om å gjøre forbedringer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi blir belønnet for å nå mål her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vi her på enheten leter etter nye måter å gjøre ting på	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
På min enhet er vi kjent med de langsiktige planene og retningen for Politiet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Har du noen kommentarer til spørsmålene over?

7 Samarbeid mellom grupper på din enhet

Du får nå en rekke påstander om hvordan de ulike gruppene samarbeider på din enhet. Dette handler om samarbeid *internt* mellom grupper på din enhet. Velg det svaralternativet som passer best for hvordan du opplever og vurderer dette.

Forholdet mellom grupper:	<i>Helt feil</i>	<i>Ganske feil</i>	<i>Verken eller</i>	<i>Ganske riktig</i>	<i>Helt riktig</i>
Folk er innstilt på å dele informasjon på tvers av gruppene her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er svært lite konflikt mellom gruppene her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Folk er mistenksomme overfor andre grupper her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er svært effektivt samarbeid mellom gruppene her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er lite respekt mellom noen av gruppene her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Folk er svært innstilt på å dele på kompetanse mellom gruppene her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Folk er svært innstilte på å dele på personer med fagkompetanse/kompetansepersoner mellom gruppene her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er mye konflikt om deling av kompetanse mellom gruppene på denne enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er effektiv deling av informasjon på tvers av gruppene her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7 Samarbeid mellom grupper på din enhet

	<i>Helt feil</i>	<i>Ganske feil</i>	<i>Verken eller</i>	<i>Ganske riktig</i>	<i>Helt riktig</i>
Her deler vi mye informasjon på tvers av gruppene på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er stor grad av samarbeid mellom gruppene her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Folk er innstilte på å samarbeide på tvers av gruppene her på enheten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Har du noen kommentarer til spørsmålene over?

8 Samarbeid mellom enheter i politidistriktet

Du får nå en rekke påstander om hvordan de ulike enhetene samarbeider i ditt politidistrikt. Dette handler om samarbeid *eksternt* mellom enheter. Velg det svaralternativet som passer best for hvordan du opplever og vurderer dette.

Forholdet mellom enheter:	<i>Helt feil</i>	<i>Ganske feil</i>	<i>Verken eller</i>	<i>Ganske riktig</i>	<i>Helt riktig</i>
Folk er innstilt på å dele informasjon på tvers av enhetene her i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er svært lite konflikt mellom enhetene her i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Folk er mistenksomme overfor andre enheter her i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er svært effektivt samarbeid mellom enhetene her i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er lite respekt mellom noen av enhetene her i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Folk er svært innstilte på å dele på kompetanse mellom enhetene her i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Folk er svært innstilte på å dele på personer med fagkompetanse/kompetansepersoner mellom enhetene her i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er mye konflikt om deling av kompetanse mellom enhetene her i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er effektiv deling av informasjon på tvers av enhetene her i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8 Samarbeid mellom enheter i distriktet

	<i>Helt feil</i>	<i>Ganske feil</i>	<i>Verken eller</i>	<i>Ganske riktig</i>	<i>Helt riktig</i>
Her deler vi mye informasjon på tvers av enhetene i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Det er stor grad av samarbeid mellom enhetene her i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Folk er innstilte på å samarbeide på tvers av enhetene her i distriktet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Har du noen kommentarer til spørsmålene over?

9 Endring på *din* enhet

De neste spørsmålene handler om hvordan du opplever endringer på din enhet. Velg det svaralternativet som passer best for hvordan du personlig opplever dette.

Dine vurderinger:	<i>Helt feil</i>	<i>Ganske feil</i>	<i>Verken eller</i>	<i>Ganske riktig</i>	<i>Helt riktig</i>
Når endringer skjer på min enhet tror jeg at jeg er klar for å takle dem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jeg prøver vanligvis å overbevise folk på min enhet om å akseptere endring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Når endringer skjer på min enhet pleier jeg å klage på dem heller enn å gjøre noe med dem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jeg tror at jeg er mer klar for å akseptere endring enn mine kollegaer på min enhet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jeg er ikke bekymret for endringer på min enhet fordi jeg tror at det er en måte å takle dem på	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Når endringer skjer på min enhet har jeg stort sett til hensikt å støtte dem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Har du noen kommentarer til spørsmålene over?

Takk for din deltakelse!