



ORIGINAL ARTICLE

# An Empirical Evaluation of the Relationship Between Human Relations Climate and Readiness for Change

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Readiness for change is seen as an important factor in organisational change processes, but it is unclear how organisational climate might affect readiness for change. Addressing this important gap, the purpose of the study was to investigate the relationship between human relations climate, a dimension of the Quinn and Rohrbaugh's competing values framework of organizational climate, and readiness for change. More specifically the aim was to investigate the mediating role of perceived organisational support. Employees in the Norwegian Police Service (N = 901) answered a survey measuring organisational culture. Data were analysed using structural equation modelling. Following a two-step analytical approach, the measurement models were first evaluated and then the relationships between constructs were examined. Evaluations of the original measurement models showed non-satisfactory fit, however after modifications, the measurement models were found to have satisfactory fit. In the second step, both the original and the modified measurement models were applied to the examination of three competing models: a partially mediated model, a fully mediated model, and a non-mediated model. Evaluation of the models showed fully mediated models (original and modified) to have the best fit to data, suggesting that the relationship between human relations organisational climate and employees' readiness for change is mediated by perceived organisational support. The finding adds theoretically to literature on organisational climate, highlighting the role of perceived organisational support. From an applied perspective actions fostering human relations climate to strengthen perceived organisational support are recommended.

**Keywords:** Competing Values Framework; Human Relations Climate; Readiness for Change; Perceived Organisational Support; Police Organisation

## Introduction

One of the defining features of contemporary organisations is 'change' (Choi & Ruona, 2011) and police organisations are no exception (Holmberg, 2018). In several European countries (including the U.K. and The Netherlands) and Scandinavian countries, police organisations are undergoing major structural reforms. These reforms are based on management theories, such as New Public Management, in order to increase cost efficiency, create perceived higher quality, and improve police operations (Balvig, Holmberg, & Højlund Nielsen, 2011; Christensen, Lægred, & Rykkja, 2018; Fyfe, Terpstra, & Tops, 2013).

International studies suggest that organisations should focus on increasing the employees readiness for change in order to increase the likelihood of successfully implementing such changes (Holt, Armenakis, Feild, & Harris, 2007; Kirrane, Lennon, O'Connor, & Fu, 2017). The situational, individual and organisational factors

supporting readiness for change is well examined (Kirrane et al., 2017; Oreg, Vakola, & Armenakis, 2011; Vakola, 2014), however, little research has been conducted on how organisational climate might modulate levels of readiness for change and other recognised antecedent variables (Kirrane et al., 2017; Oreg et al., 2011).

Organisational climate has often been studied as the mediator of different relationships, while studies examining the mediators between climate and outcomes are more rare (Kuenzi, 2008). The aim of the present study is to address this gap in the climate literature by exploring the paths through which human relations climate, as defined in Rohrbaugh's competing values framework (Quinn & Rohrbaugh, 1983), influences readiness for change. More specifically, the study investigates the mediating role of perceived organisational support between human relational climate and readiness for change. In organisational research, perceived organisational support refers to the extent that individuals believe that their organisation values their contributions and cares about their well-being (Eisenberger, Huntington, Hutchison, & Sowa, 1986). By applying structural equation modelling, this study tests if the effect of human relations climate on readiness for change is mediated by perceived

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organisational support. The model was tested on a sample from the Norwegian police service.

**Conceptual Background and Hypotheses**

**Readiness for change**

According to Armenakis, Harris and Mossholder (1993), *readiness for change* refers to individuals' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organisation's capacity to successfully undertake those changes. Employees' readiness is essential because it has been proven to play a vital role in every organisational change and is also an important driver of change success (Armenakis et al., 1993; Oreg et al., 2011; Vakola, 2014). If employees do not believe that change is needed, then change initiatives may ultimately fail (Rafferty & Simons, 2006).

The antecedents to *readiness for change* can be divided into two categories: (i) climate-based factors (which include the organisation's trust in management and cohesion), and (ii) process-based factors (including degree of participation and supervisors' support for the change (Bouckennooghe, 2010; Bouckennooghe, Devos, & Van den Broeck, 2009; Kirrane et al., 2017). The model proposed in this paper will thus include both climate- and process-based factors, expanding our knowledge of what factors affect individuals' *readiness for change*.

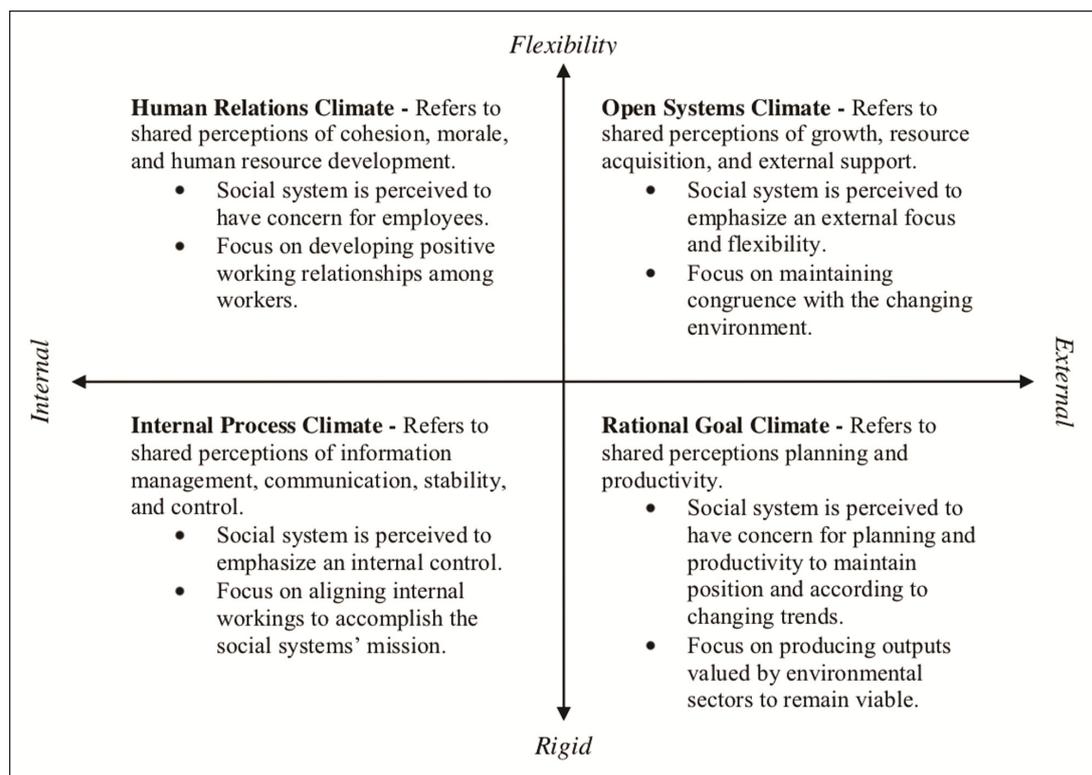
**Human relations climate**

Organisational climate has been recognised as one of the most important factors that either decreases or increases individual *readiness for change* (Choi & Ruona, 2011; Haffar, Al-Karaghoul, & Ghoneim, 2014; Jones, Jimmieson, & Griffiths, 2005; Weiner, 2009) and has, therefore, begun to receive considerable attention within

the organisational research literature. Organisational climate focuses on policies, procedures and practices within organisations and studies show that organisational climate is linked to a range of individual attitudes such as satisfaction, commitment, absenteeism, performance and effectiveness, among others (Huhtala & Feldt, 2016; Kuenzi, 2008; Kuenzi & Schminke, 2009; Lone et al., 2017; Schneider, Ehrhart, & Macey, 2013). Experience from other police reforms such as the ones in Finland and Scotland, show that employees tend to bring along their ideas, values and practices, and that not paying attention to the organisational climate may affect the employees' job satisfaction and well-being (Elliot & Tatnell, 2016; Fyfe et al., 2013).

One of the most recognised models used in organisational climate research, during the last decades, is the *competing values framework* (Quinn & Rohrbaugh, 1983; Hartnell, Ou, & Kinicki, 2011; Hartnell, Ou, Kinicki, Choi, & Karam 2019). The *competing values framework* was originally developed in order to capture the effectiveness of organisations. According to the model, the effectiveness criteria can best be understood when organised along two fundamental dimensions: (i) external versus internal focus, and (ii) flexibility versus control. When organising these value dimensions in a diagram, we get four different climate types as shown in **Figure 1**.

Lone et al., (2017) investigated the organisational climate in the Norwegian Police. Based upon a deductive content analysis of 38 interviews of participants in the Norwegian Police, the study identified 5,749 statements from the interviews concerning organisational climate. A deductive content analysis using the *competing values framework* revealed that all of the participants mentioned the *human relations* variable in the *competing values*



**Figure 1:** The four climate types of the competing value framework (after Goodman, Zammuto & Gifford, 2001: 60).

*framework*. Statements related to human relations were the most frequent statements related to the competing value framework model. In the present study, we therefore focus on the *human relations* quadrant in the *competing values framework* model as a predictor latent variable.

An organisational climate emphasising human relations values will be characterised by 'fostering high levels of cohesion and morale among employees through training and development, as well as participative decision-making'(Quinn & Rohrbaugh, 1983). As already mentioned, the choice of the human relations climate in the *competing values framework* is based upon a study by Lone et al., (2017). They found that a human relations climate, in the Norwegian Police Services, enhances investigation performance through its effects on human capital, such as knowledge skills and ability, and through enhanced levels of cooperation and coordination of resources between units and districts. Also known as *clan culture*, a core belief in human relations climate is that the organisation is committed to the employees, and thus facilitates teamwork, participation and involvement (Eby, Adams, Russell, & Gaby, 2000; Hartnell, Ou, & Kinicki, 2011; Jones et al., 2005). This is believed to increase the employees' confidence and capabilities to encounter new workplace challenges, such as organisational change. Thus, our first hypothesis is that human relations climate will be directly positively related to employees' readiness for change.

#### Perceived organisational support

According to organisational support theory, *perceived organisational support* is developed by employees' tendency to give their organisation humanlike characteristics (Eisenberger et al., 1986). As a result of the norm of reciprocity, a strong organisational support will likely create an obligation to care about the organisation's welfare and objectives (Rhoades, Eisenberger, & Murphy, 2002). Research on *perceived organisational support* has found evidence that employees tend to believe that the organisation holds a general positive or negative orientation towards them, in regard to both their contributions and their well-being. High levels of *perceived organisational support* have been found to be strongly related with both affective commitment and positive mood, and with helping employees cope with the demands of their role (Bakker, Demerouti, & Verbeke, 2004; Lynch, Eisenberger, & Armeli, 1999; Rhoades et al., 2002).

In the context of organisational climate, *perceived organisational support* is generally understood as leading to more supportive attitudes towards the change, as a way of helping the organisation reach its goals (Bouckennooghe et al., 2009; Eby et al., 2000; Kirrane et al., 2017; Rafferty & Simons, 2006). Thus, our second hypothesis postulates a positive association between perceived organisational support and readiness for change.

Organisations with high emphasis on the human relations values believe that in order to succeed they must hire, develop, and retain their human resource-base.

In other words, there is a high trust and commitment to the employees working in the organisation (Hartnell et al., 2011). Consequently, these organisations value attachment, affiliation, membership, and support (Cameron & Quinn, 2011). Several studies examining the *competing values framework* have found evidence that human relations climate is related to organisational support (Carr, Schmidt, Ford, & DeShon, 2003; Goodman, Zammuto, & Gifford, 2001; Haffar et al., 2014; Schulte, Ostroff, Shmulyian, Kinicki, & Kozlowski, 2009). It is also argued that *perceived organisational support* shares many similarities with human relations climate, with its emphasis on the well-being and development of employees (Lone et al., 2017). Lone et al., (2017) presented an interview study showing how a human relations climate guides and precedes specific set of behaviours in police investigations (see p237, fig3). Thus, our third hypothesis is that human relations climate will be positively related to *perceived organisational support*.

In addition to being related to readiness for change, *perceived organisational support* is also linked to other outcomes, such as increased affective commitment and has also been found to increase the work performance in the police (Armeli, Eisenberger, Fasolo, & Lynch, 1998). Following Bouckennooghe et al., (2009), *perceived organisational support* can be characterised as a process-based antecedent of *readiness for change*, whereas a human relations climate will work as a climate-based antecedent. As a result, the final hypothesis of this study argues that perceived organisational support mediates the relationship between human relations climate and readiness for change.

In sum, this paper proposes a theoretical model consisting of four hypotheses. H(1) states that human relations climate will be directly positively related to employees' readiness for change. H(2) states that there will be a positive association between positive organisational support and readiness for change. H(3) states that human relations climate will be positively related to positive organisational support. H(4) states that positive organisational support mediates the relationship between human relations climate and readiness for change.

#### Method

This study applied a cross-sectional design, using a questionnaire to examine the organisational climate in the Norwegian Police.

#### Organisational context

The data was gathered shortly before the Norwegian Police Service underwent a large police reform, restructuring from twenty-seven to twelve police districts, which largely impacted on all employees and the organisation as a whole.

The Norwegian Centre for Research Data approved the study. All respondents were informed about the purpose of the study, how the data was to be stored and that no personal information would be disclosed. The participation was voluntary and it was possible to withdraw the consent at any time.

### Sample

The surveys were distributed on paper and had a response rate of 58% (N = 938). Missing data were found for 67 participants. Here, 37 participants with 20% or more items missing were deleted from the sample in order to counter potential bias caused by non-random missing. The remaining missing items represented 0.28% of the dataset. Missing analysis showed a non-significant Little's MCAR test  $\chi^2(521) = 513.53, p = .58$  indicating that the items were missing completely at random. A single imputation procedure using the Expectation Maximization (EM) algorithm was utilised to provide unbiased parameter estimates and increase statistical power (Enders 2001). The final sample consisted of 52% male and 48%, female respondents, with the most frequent age group being 24–27 years (16.7%). The majority of the respondents worked within criminal investigation (25.5%), operational tasks (20.5%), or was employed with civilian background (27.4%).

### Measures

Respondents were asked to base their answers on their own experience with working in the police and to answer all the questions as far as possible. All the measures were rated on a 5-point Likert-scale, ranging from 'definitely false' (1) to 'definitely true' (5). The middle value (3) was 'neither true nor false' which allowed for neutral responses.

#### Readiness for change

The scale consists of six items adopted from Vakola (2014) who defines individual readiness for change as, '...willingness to support change and confidence in succeeding in change' (Vakola, 2014: 196). The measurement has previously been translated to Norwegian (Koritzinsky, 2015). Sample items are 'When changes occur in my company, I believe that I am ready to cope with them' and 'I don't worry about changes in my company because I believe that there is always a way to cope with them' (Vakola, 2014).

#### Human relations climate

This six-item measure of human relations climate (Kuenzi, 2008) builds on the competing values framework. The scale has been translated to Norwegian and adapted for measuring police climate (Koritzinsky, 2015). Three sample items are 'Employees develop supportive, positive working relationships among organization members', 'The environment is such that members of the unit get along well with each other' and 'Employees help each other when needed'.

#### Perceived organisational support

The measure of perceived organizational support was adopted from Lynch et al., (1999) and translated to Norwegian for the present study. The scale consists of eight items, intending to measure whether the employees perceive that their organisation cares about their well-being, is concerned about the opinions of the employees, and is willing to help if the employees are in need of any special favours. Two sample items are 'My organisation

strongly considers my goals and values' and 'Help is available from my organisation when I have a problem.' Lynch et al., (1999).

### Statistical analyses

IBM SPSS version 25 was used for initial statistical analyses such as descriptives, missing analyses and bivariate inter-correlations (r) among study variables. Structural equation modelling (SEM) with maximum likelihood parameter estimation was used to examine the hypotheses. The analyses were conducted using the software AMOS version 25. Bootstrapping of the estimates was conducted to obtain bias-corrected 95% confidence intervals of the effects for the SEM-analysis. The confidence intervals were based on 10,000 bootstrap samples generated by random sampling with replacement from the data.

Structural equation modelling (SEM) comprises of two submodels: (i) a measurement model defining the relations between the observed and unobserved latent variables, and (ii) a structural model defining the relations between the latent variables (Kline, 2011). We evaluated overall goodness of fit using the following fit indices: Chi-square, the comparative fit index (CFI), the Root Mean Square Error of Approximation (RMSEA), 90% confidence interval values for RMSEA, and the Standardised Root Mean Square Residual (SRMR), as recommended by Kline (2011). Following Hu and Bentler (1999), CFI values greater than .95, RMSEA values below .06, and SRMR values less than .08 were considered indications of good model fit. The Bayesian Information Criterion (BIC) was used for model comparison. Lower BIC values imply improved fit. According to Raftery (1995), a difference in BIC values between 6 and 10 is considered a strong indication of a meaningful difference between the models, while a difference larger than 10 is considered very strong.

Poorly fitted measurement models may influence global fit substantially (Williams, Vandenberg, & Edwards, 2009). To investigate this possibility, we used confirmatory factor analyses to examine the measurement models for *human relations*, *perceived organisational support*, and *readiness for change*. Local fit was examined by looking at residuals, factor loadings, regression coefficients, and modification indices, to identify eventual psychometric problems. As shown in **Table 1**, the results of the confirmatory factor analyses showed that none of the measurement models meet all criteria for good fit. RMSEA specifically seems to be outside of what could be considered an acceptable fit. Further inspection revealed that one of the items in the *readiness for change*-scale ('I believe that I am more ready to accept change than my colleagues') should be removed due to high standardised covariance residuals and low factor loading. Contrary to other items in the *readiness for change*-scale, this item asks for a comparison with colleagues, making the item more difficult to apprehend and thereby more vulnerable to increased noise (Little, Rhemtulla, Gibson & Schoemann, 2013). After removing this item, the *readiness for change* measurement model showed satisfactory fit (**Table 1**).

A corresponding problem was present also in the *perceived organisational support*-scale. For the item 'The organization would forgive an honest mistake on

my part' the standardised covariance residuals were high while the factor loading was relatively low. The reason may be noise imposed by the word 'honest', which represents an extra subordinate clause in the question (Little, et al., 2013). Removing this item from the *perceived organisational support-scale* improved the fit statistics for all indices, but RMSEA, which was still unsatisfactory.

After examining the modification indices, two cases of high co-variation between error terms were identified. The first co-variation was observed between items five and six on the *perceived organisational support-scale*. Inspection of the items revealed that the items ('This organisation is willing to help employees if they need a special favour' and 'Help is available from this organization when employees have a problem') were similar with regard to both meaning and wording.

The second covariance was observed for item two and three in the *human relations-scale* ('The work environment is such that members of the unit get along well with each other' and 'We have little conflict between members of the unit'). Again, the items are strongly related and could be interpreted as consequences of each other in term of describing conflict, both from a positive ('get along well') and negative ('conflict between members') wording.

We acknowledge that differing opinions exist about the legitimacy of allowing error terms to co-vary without a strong theoretical justification (e.g., Jöreskog, 1993, Hermida, 2015). To avoid the problem of correlated error terms, while at the same time preserving most of the unique variance contained in of the original items, each pair were parcelled and the average used as empirical indicator in the analysis. As shown in **Table 1**, confirmatory factor analyses, including parcelled items, showed satisfactory fit statistics both for *human relations* and *perceived organisational support*. The structural model was analysed both with and without the revised scales to allow comparison.

Lone et al., (2017) have shown that the *perceived organisational support-scale* shares many similarities with the *human relations-scale*. It is thus possible to argue that the scales overlap and basically represents the same phenomenon. To test this possibility, three different models were tested: a model containing one common factor, a model containing two factors, where *perceived organisational support* and *human relations* were treated as one latent factor and *readiness for change* as a second independent, but correlated factor, and finally a three factor model, testing solutions both with uncorrelated and correlated factors. As shown in **Table 2**, a three-factor

**Table 1:** Goodness of fit statistics for confirmatory factor analyses of measurement models.

Scale	$\chi^2$	df	CFI	RMSEA [90% CI]	SRMR	BIC	Comments
<i>Readiness for change</i>							
Original model	79.00***	9	.942	.093 [.075, .112]	.047	160.640	
Modified model	22.29***	5	.984	.062 [.037, .089]	.022	90.325	Item 4 removed
<i>Perceived organisational support</i>							
Original model	365.56***	20	.911	.139 [.126, .151]	.054	474.417	
Modified model 1	287.49***	14	.922	.147 [.133, .162]	.051	382.783	Item 7 removed
Modified model 2	47.83***	9	.987	.069 [.051, .089]	.021	129.476	Item 7 removed, item 5 and 6 parcelled
<i>Human relations climate</i>							
Original model	60.99***	9	.979	.080 [.062, .100]	.025	142.632	
Modified model	15.45**	5	.995	.048 [.022, .076]	.015	83.482	Item 2 and 3 parcelled

Note: N = 901;  $\chi^2$  = chi-square; df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square; CI = Confidence Interval; BIC = Bayesian Information Criteria. \*\* p < .01; \*\*\* p < .001; Modified model, see comments.

**Table 2:** Goodness of fit statistics for confirmatory factor analyses of full measurement models.

Measurement model	$\chi^2$	df	CFI	RMSEA [90% CI]	SRMR	BIC
1-factor model	2479.98***	104	.626	.159 [.054, .165]	.135	2697.695
2-factor uncorrelated model	1685.45***	104	.751	.130 [.125, .135]	.141	1903.160
2-factor correlated model	1600.07***	103	.764	.127 [.122, .133]	.102	1824.582
3-factor uncorrelated model	602.21***	104	.922	.073 [.067, .079]	.174	819.925
3-factor correlated model	308.53***	101	.967	.048 [.042, .054]	.044	546.649

Note: N = 901;  $\chi^2$  = chi-square; df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square; CI = confidence interval; BIC = Bayesian Information Criteria. \*\*\* p < .001.

model with correlated factors showed the best fit on all goodness of fit measures, indicating that the three factors indeed should be considered different constructs.

An initial structural model was drawn based on the four theoretical hypotheses presented previously. Human relations was entered as exogenous predictor variable, *perceived organisational support* as endogenous predictor variable, while *readiness for change* acted as criterion variable. Hypothetical direct causal paths were added between each predictor variable and *readiness for change*. A proposed causal path was added also from *human relations* to *perceived organisational support*. Adopting the model testing strategy proposed by Kelloway (2015), the initial model represents and tests the hypothesis of partial mediation. In addition, two alternative models, a fully mediated model and a non-mediated model, were tested. Both alternative models were identical to the partially mediated model except for one parameter. In the fully mediated model, the causal path from *human relations* to *readiness for change* was constrained to zero while the causal path from *perceived organisational support* to *readiness for change* was constrained to zero in the non-mediated model. Both the fully mediated model and the non-mediated model were nested within the partially mediated model. The Chi-square difference tests ( $\Delta\chi^2$ ) and the Bayesian Information Criterion (BIC) were used to determine the best fitting model.

**Results**

**Table 3** provides descriptive statistics, scale reliabilities and bivariate zero-order correlations for the variables included in the structural model. As shown in **Table 3**,

moderate zero-order correlations were found between the included variables. The most prominent correlation was between *human relations* and *perceived organisational support*. Coefficient alpha was satisfactory for all measures.

We examined three competing SEMs to test the four hypotheses. The first model assumed that partial mediation provided best fit to the empirical data. The second model assumed that full mediation provided the best fit, while the third model tested the assumption of non-mediation. All three models were tested both with and without modifications made to the measurement models. The goodness-of-fit measures are shown for all tested models in **Table 4**.

The results revealed significant Chi-squares for all models tested implying that the assumption of exact fit with the empirical data was rejected for all models. Considering the sample size of the study this result was expected. Examining the goodness-of-fit measures shown in **Table 4** revealed RMSEA values below 0.08 and CFI above 0.90, for all models, except the unmodified non-mediated model. SRMR was below .08 for all models, except the two models testing the hypothesis of non-mediation. The results showed improved goodness of fit measures for all models containing modified measurement models compared to models with unmodified factors. For models based on the original non-modified factors, the chi-square difference test revealed that the difference between the partially mediated model and the fully mediated model was not significant ( $\Delta\chi^2 = 1.58, \Delta df = 1, p = .21$ ). This suggests that the level of fit is similar for the two models. In this case, Kelloway (2015) recommends retaining the most parsimonious model (i.e., the model comprising the

**Table 3:** Descriptive statistics, reliability and bivariate correlations between main indices.

Construct	Mean	SD	$\alpha$	1.	2.
1. Perceived organizational support	3.434	0.718	.895		
2. Human relations climate	4.037	0.606	.879	.505***	
3. Readiness for change <sup>a</sup>	3.934	0.563	.764	.312***	.231***

Note: N = 901;  $\alpha$  = Cronbach's alpha; <sup>a</sup>Item four removed. \*\*\* p < .001.

**Table 4:** Goodness of fit statistics for structural models with and without modified measurement models.

Model	$\chi^2$	df	CFI	RMSEA [90% CI]	SRMR	BIC
<i>Original measurement models</i>						
Partially mediated model	848.84***	167	.916	.067 [.063, .072]	.062	1141.385
Fully mediated model	850.42***	168	.916	.067 [.063, .072]	.062	1136.171
Non-mediated model	1055.17***	168	.890	.077 [.072, .081]	.148	1340.916
<i>Modified measurement models</i>						
Partially mediated model	308.53***	101	.967	.048 [.042, .054]	.044	546.649
Fully mediated model	312.51***	102	.967	.048 [.042, .054]	.046	543.825
Non-mediated model	517.72***	102	.935	.067 [.062, .073]	.149	749.042

Note: N = 901;  $\chi^2$  = chi-square; df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square; CI = confidence interval. BIC = Bayesian Information Criteria. \*\*\* p < .001

fewest estimated parameters). The fully mediated model has one degree of freedom less compared to the partially mediated model, thus making the fully mediated model the most parsimonious and thereby the preferred model. The BIC values adds to this conclusion. The fully mediated model showed reduced values compared to the partially mediated model ( $BIC_{diff} = 5.214$ ), but the difference did not reach the threshold indicating strong support for a meaningful difference between models (Raftery, 1995). Further, the results showed that the differences between the partially mediated and the non-mediated model ( $\Delta\chi^2 = 206.33$ ,  $\Delta df = 1$ ,  $p < .001$ ) were significant, which indicates that restraining one parameter may yield reduced fit to the data. The other fit measures, including the difference in BIC, substantiate the impression that the non-mediated model has the poorest fit.

The results for models based on modified measurement models showed the same overall pattern, although with one exception – the difference between the partially mediated and the fully mediated model was marginally significant ( $\Delta\chi^2 = 3.98$ ,  $\Delta df = 1$ ,  $p = .046$ ). This finding indicates that improved fit for the partially mediated model compared to the fully mediated model cannot be totally dismissed. According to Kelloway (2015), this implies that the partially mediated model should be retained. BIC, on the other hand, showed slightly reduced values for the fully mediated model. The difference in BIC values ( $BIC_{diff} = 2.824$ ) was below the threshold for strong support (Raftery, 1995). The other goodness of fit measures showed a minor improvement in SRMR for the fully mediated model, while the CFI and RMSEA values were identical.

With regard to the non-mediated model, the results corroborate the impression that this model has the poorest fit. The difference between the partially mediated model and the non-mediated model was significant ( $\Delta\chi^2 = 209.19$ ,  $\Delta df = 1$ ,  $p < .001$ ), and all other fit measures were poorer compared to the other two models.

The path coefficient between *human relations* and *readiness for change* in the partial mediated model failed to reach significance both in the model based on the original unmodified factors ( $\beta = .06$ ,  $p = .240$ ) and in the model based on modified measurement models ( $\beta = .09$ ,  $p = .077$ ). Thus, even though fit indices gave somewhat conflicting results, taking local fit into account provided further arguments for retaining the fully mediated model as the preferred model.

The fully mediated model, containing modified measurement models, is shown in **Figure 2**. The model explained 12% of the variance in the criterion variable, readiness for change. Direct and indirect path estimates, probability values ( $p$ ), and their associated 95% confidence intervals (CI) for the fully mediated model are shown for both unmodified and modified factors in **Table 5**.

## Discussion

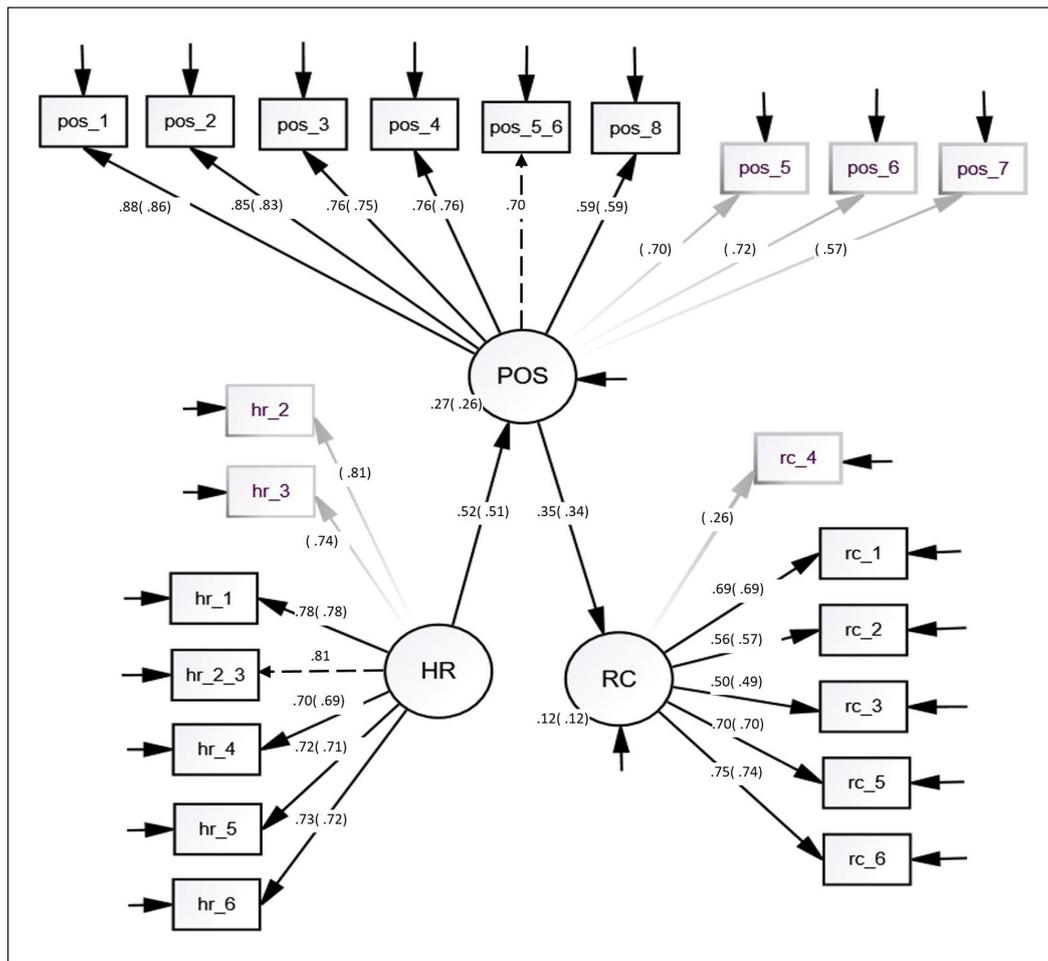
The purpose of the present study was to examine the relationship between human relations climate and readiness for change, and the mediating role of perceived organisational support, based on a sample from the

Norwegian Police Service. The theorised model presented four possible hypotheses. Hypothesis one postulated a direct positively relationship from human relations climate to *readiness for change*. This assumption does not seem to be supported by the data, although the existence of a weak direct association cannot be ruled out as a theoretical possibility in other samples. Instead, the data indicate an indirect mediated relationship that links human relations climate to readiness for change through perceived organizational support. Thus, the obtained results provided support for both hypothesis two and three suggesting that *human relations climate* is positively associated with *perceived organisational support* and that *perceived organisational support* is positively associated with CR. Further, the results support the fourth and last hypothesis that *perceived organisational support* would mediate the relationship between human relations climate and readiness for change. Put together, these findings support a fully mediated model as the most appropriate for explaining the relationships between the examined variables, that is, the effect of human relations climate on employees' readiness for change can be assumed to be fully mediated by positive organizational support.

## Theoretical Implications

Bouckenoghe et al., (2009) have examined the antecedences of *readiness for change*. The argument has been that a low level of individual *readiness for change* has been identified as the major reason for failure in implementing a successful organisational change (Armenakis et al., 1993; Haffar et al., 2014). Researchers have described employees' readiness for change as vital, since 'organisations only change and act through their members, and even the most collective activities that take place in organisations are the result of some amalgamation of the activities of individual organisational members' (George & Jones, 2001: 420). The results from our study confirm findings from studies that have linked a human relations climate to enhanced *readiness for change* (e.g., Choi & Ruona, 2011; Eby et al., 2000; Rafferty & Jimmieson, 2010). Jones et al., (2005) argue that *readiness for change* may be the most essential mechanism in the successful change in an organisational culture. Similar to Lone et al., (2017), the study from Jones et al., (2005) emphasizes human relations values as important antecedents for the successful change outcomes. However, Oreg et al., (2011) and Kirrane et al., (2017) point out that the relationship between *readiness for change* and various climate-based antecedents is likely to be more complex than current research suggests. They argue that new research is needed to investigate mediating variables between antecedents and *readiness for change*.

Cameron and Quinn argue that *the competing values framework* has been found to 'have a high degree of congruence with well-known and well accepted categorical schemes that organize the way people think, their values and assumptions, and the ways they process information' (2011: 37). The authors argue that the *competing values framework* occurs 'because of an underlying similarity in people at the deep psychological level of their cognitive



**Figure 2:** The final fully mediated model depicting structural relationships between the exogenous predictor variable, endogenous predictor variable, and criterion variable. Both original and modified measurement models are displayed.

Notes:

- a. Exogenous predictor variable: HR = human relations climate; Endogenous predictor variable: POS = perceived organisational support, Criterion variable: RC = readiness for change.
- b. Dotted arrows = Paths and items only present in the modified model. Greyed out arrows/items = Paths and items only present in the original model.
- c. Numbers shown as standardized estimates. Estimates from the original model in parenthesis.
- d. Paths constrained to zero and error terms are omitted to enhance readability.

**Table 5:** Estimates of the direct and indirect effects between latent variables of the fully mediated model based on the original and modified measurement models respectively.

Path estimate	<i>b</i>	SE	95% CI	$\beta$
<i>Original measurement model</i>				
HR → POS	.72***	.053	[.625, .832]	.51***
POS → RC	.18***	.023	[.135, .225]	.34***
HR → POS → RC	.13***	.020	[.095, .172]	.17***
<i>Modified measurement model</i>				
HR → POS	.75***	.054	[.652, .861]	.56***
POS → RC	.17***	.021	[.133, .217]	.35***
HR → POS → RC	.13***	.019	[.097, .172]	.18***

Note: HR = human relations climate, POS = perceived organisational support, RC = readiness for change, *b* = unstandardized path coefficient, SE = standard error, CI = bias-corrected confidence interval (Unstandardized),  $\beta$  = standardized path coefficient. \*\*\* *p* < .001.

process' (Cameron and Quinn, 2011; 37). Alternatively, we argue that our results indicate that the *human relations* component of the *competing values framework* does not reflect any 'underlying similarity' in cognitive processes, but instead reflects how the organisational practices, as organisational support, align with how people think and process cognitive information. Hence, our results may support the sociotechnical theory stating that organisational culture adapt and respond to challenges and changes in the organisations technical and social development (endurance).

The *competing values framework* hypothesizes that the perceived organizational component human relations climate, might serve as an antecedent for other climate components (Quinn & Rohrbaugh, 1983), as perceived readiness for change of the organization (Armenakis, Harris & Mossholder, 1993). However, the perception of both human relations climate and readiness for change are not rigid and clearly defined concepts, but are dynamic and complex concepts and might change depending upon the technical and social developments within the Norwegian police organization. The present study indicates that perceived organizational support as defined by Bouckenoghe et al., (2009) might be one social candidate that influences how the members develop readiness for change. Other organizational components as organizational learning might as well be candidates for developing readiness for change.

Our study found that *perceived organisational support* mediates the relationship between human relations climate and *readiness for change*. The findings address a gap in the climate and *readiness for change* literature. The strong link we found between human relations climate and *perceived organisational support* suggests that organisations with strong human relations values will have a climate that is likely to foster strong organisational support.

Organisational change can cause a sense of disruption and fear among employees. Our findings suggest that support from the organisation and a climate that emphasizes the contributions from their employees might reduce this anxiety and increase the *readiness for change*. The results are consistent with the findings reported by Kirrane et al., (2017) that highlight the importance of considering and evaluating organisational climate in advance of an organisational change process.

Lastly, newer research on *readiness for change* has found evidence that employees' readiness for change is fluid and likely to evolve throughout the implementation of a major organisational change (Hemme, Bowers, & Todd, 2018). This implies that readiness for change needs to be monitored and facilitated throughout the entire change process. As the current study shows, focusing on human relations values and organisational support may then help fostering employees' readiness for change.

Technical and social development of society are perhaps the most potent factors that affect the development of the police organization. That is, the climate in police organization might not be perceived as closed and

independent of the society. Consequently, we might argue that readiness for change in a larger analysis should include both internal police organizational climate, and more broadly, change processes in the society.

### **Practical Implications**

The information about how organisational climate relates to readiness for change can, for instance, be used in the diagnostic phase when planning an organisational change (Eby et al., 2000). According to Cameron and Quinn (2011), ignoring the effects of organisational climate is one of the biggest barriers in implementing new change initiatives. They recommend to always start with diagnosing and assessing the current status of the organisational climate before starting the change process. Both general factors (such as climate) and more specific factors (such as organisational support), may represent conditions necessary for a successful implementation of a change effort (Eby et al., 2000; Haffar et al., 2014).

One approach could be to assess the organisational climate and identify the gap between the current position of the 'organisational climate' and the wanted characteristics required to achieve higher *readiness for change*. This can make it easier to identify changes needed to build a more supportive and participative climate. If considerable gaps are detected and no improvements are made, one can expect to find low levels of readiness for change, consequently threatening the change implementation (Haffar et al., 2014). This approach would align with Yilmaz (2013) discussing the so-called 'Tailoring Model' in understanding reforms in police organisations. This perspective emphasises the need to do an initial measurement and analysis of the organisation that forms the basis for 'tailoring' the change intervention to the organisation at hand. Given that our findings support the notion that readiness for change has a more complex relationship to its antecedents, the Tailoring Model approach seems an interesting path to explore further.

### **Limitations of Study**

Like all studies, there are some methodological and theoretical limitations that need to be addressed. The first concerns the use of self-report measures which increases the risk of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In addition, the use of a cross-sectional research design makes it difficult to establish the direction of causality between the variables. This means that perceived organisational support might be the precursor of human relations climate, or the two might mutually enhance each other. We therefore recommend examining these relationships using a longitudinal study. Another limitation concerns the generalisability of the current study. As the sample is limited to the Norwegian Police service, samples from other sectors or police organisations in other countries might not produce the same results.

As discussed, human relations climate is characterized by the high consideration and support the organisation has for its employees. The high correlation found

between perceived organisational support and human relations, might imply that these two variables share some conceptual overlap. However, the confirmatory factor analysis shows that, although similar, they are distinct factors. This study is also limited to only one mediating variable and to one of the four quadrants in the competing values framework. To get a deeper understanding of the antecedents of readiness for change, we recommend to explore other possible mediators, and to explore how other climate types might relate to readiness for change.

The instrument measuring positive organisational support was translated to Norwegian for this study, and that may be an additional confounding factor. Future research should investigate the suitability and robustness of the version used.

### Conclusion

The relationship between organisational climate and readiness for change is complex. This study addresses gaps in the literature by examining mediating variables between climate and readiness for change, giving new insights into processes related to antecedents of readiness for change. Our results indicate that perceived organisational support fully mediates the relationship between human relations climate and readiness for change. This is an important theoretical contribution of this study, since the findings highlight the central role of perceived organisational support as a mediator between human relations climate and employees' readiness for change. Further, from an applied perspective, this suggests that organisations undertaking organisational changes should focus on actions that strengthen employees experience of human relations climate to increase perceived organisational support, in order to foster readiness for change and thus promote successful organisational change.

### Competing Interests

The authors have no competing interests to declare.

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