

Chasing High-performing Police Teams

A mixed-methods study identifying the roles of antecedents of team learning on team performance in a police work setting

Author: Renske Carlijn ten Brinke
S1617567
University of Twente
P.O. Box 217, 7500AE Enschede
The Netherlands

ABSTRACT

Purpose: This research aims to add new insights on team performance and related variables in a police work setting. This research attempts to identify mutual relations between leadership style, psychological safety, information sharing, team learning, and team performance in police teams and to identify characteristics of high performing police teams. In practice, this research aims to help police teams to enhance team performance by identifying the roles of the previous named variables.

Design/methodology/approach: Survey responses of team members (n = 48) were aggregated at team level (n = 7). Linear regression was performed to test the four hypotheses. Median split method was used to divide the teams in two groups: moderate performing teams and high performing teams. Independent samples t-tests were used to test for significant differences. Data from the interviews with team leaders was analyzed by coding.

Findings: Transformational leadership was positively related to psychological safety. Psychological safety predicted information sharing. Team learning was positively related to team learning. High performing teams have a leader that is both transformational and transactional, high psychological safety, a high level of information sharing, team learning, and stability.

Discussion: Information sharing did not mediate between psychological safety and team learning. Possibly, this is caused by an information overload in the police teams. This makes it difficult to use and process relevant information. Regularly, there are changes in team composition. Stability is suggested to be important, as it possibly impacts psychological safety, information sharing, team learning, and team performance.

Graduation Committee members:

Jacco Smits, MSc

Dr. Desirée van Dun

Keywords

Police teams, team performance, transformational leadership, transactional leadership, psychological safety, information sharing, team learning.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

November 19th, 2017, Enschede, The Netherlands.

Copyright 2017, University of Twente, The Faculty of Behavioral, Management and Social sciences.

1. INTRODUCTION

1.1 Foundation for the research

This research examines the team performance of several teams of a regional police department and how this might be improved. The regional police department investigates (complex) crimes, such as stab incidents, murder, and kidnapping. The regional police department tries to solve those crimes by chasing criminals. The regional police department designed its own organizational structure years ago and currently consists of seven teams. All teams are managed by one leader. Four teams are responsible for the investigation of generic cases, such as murder; one team is responsible for the investigation of housing burglaries; one team is responsible for the investigation of robberies; one team receives all new cases, designs approaches for investigations and passes cases to the most appropriate team of the regional police department.

In 2017, the regional police department decided to adjust its organizational structure to improve team performance. Regularly, challenges arise with the employment of teams. Teams are often borrowing staff from other teams, due to a lack of the necessary capabilities and expertise in their own team. Besides this, based on an intake interview with a key informant, the content and level of information sharing is suggested to differ between teams and team leaders.

The regional police department introduced a team, consisting of team members and team leaders of the regional police. This team is responsible for designing a new organizational structure to enable the regional police department to enhance team performance. To design such an organizational structure, the team needs to be informed about factors that influence team performance.

1.2 Objective

This research attempts to add new insights on team performance and related variables in a police setting. This research aims to show what the mutual relations are of transformational leadership, psychological safety, information sharing, team learning, and team performance in police teams. This research also aims to provide insights in characteristics of high performing police teams.

In practice, this research attempts to inform the police about the roles of transformational leadership, transactional leadership, psychological safety, information sharing, and team learning on team performance. This research gives the regional police department and other police forces the opportunity to learn what variables impact team performance and how team performance can be enhanced.

1.3 Research topic and conceptual model

The police is often seen as a special, and unique organization (Terpstra, 2009), where work takes place in an uncertain dynamic environment (Crank, 2014). Regional police departments are doing important and unique work for society. The goal of regional police departments is to chase criminals and solve as many cases as possible. Sometimes, regional police teams achieve to save lives. Regional police teams attach value to direct action (Reuss-Ianni, 1983) Regional police departments support conviction of criminals (Klerks, 2007). Regional police departments are often under pressure. Outsiders often do not know what work is being done and what is being achieved (Huisman, Princen, Klerks & Kop, 2016). Weeks, sometimes months or years, of investigations are required to solve crimes (Klerks, 2007) and for regional police departments to reach their goal. Glomseth, Gottschalk, and Solli-Saether (2007) argue that police team performance is

strongly influenced by team learning. Team learning involves experimenting, reflection on results and discussion about errors and unexpected outcomes of actions (Edmondson, 2002) and processing of information (Groen & Rijgersburg, 2012). It increases one's understanding of the environment (Glomseth, Gottschalk & Solli-Saether, 2007). As shown in previous research, the level of information sharing depends on the level of psychological safety that team members perceive. The level of psychological safety depends on the leadership style used (Edmondson, 1999; Edmondson & Nembhard, 2006).

In figure 1, the proposed model for the variables and their mutual relations in police teams can be found. This will be elaborated in section 2.

1.4 Research question

The following research question is formulated: "What variables impact high performance in police teams?"

To answer this question, five sub questions are formulated:

- 1) What are unique characteristics of the regional police?
- 2) How is transformational leadership related to psychological safety in police teams?
- 3) What is the relation between psychological safety and information sharing in police teams?
- 4) What is the role of information sharing between psychological safety and team learning in police teams?
- 5) How is team learning related to team performance in police teams?

2. THEORY: TEAM PERFORMANCE, LEADERSHIP STYLE, PSYCHOLOGICAL SAFETY, INFORMATION SHARING, AND TEAM LEARNING

According to Joseph (2009), leadership plays a key role in ensuring the achievement of desired outcomes and goals. Bass suggested two different leadership styles. First, there is "transactional leadership", which is based on transactions between managers and employees. It involves a leader getting things done by making and fulfilling promises of recognition, pay increases and advancements for employees who perform well, while employees who do not perform well will be penalized (Bass, 1990). Second, there is "transformational leadership", which involves leaders who broaden and elevate the interests of employees, leaders who generate awareness and acceptance of the purposes and mission of the group, and leaders who stir their employees to look beyond their own self-interest for the good of the group (Bass, 1990). These may be achieved in more than one way: leaders may be charismatic and inspire them; they may meet the emotional needs of each employee; and/or they may intellectually stimulate employees (Bass, 1990). Edmondson (1999) suggests that leaders have an impact on what employees consider to be appropriate behavior by the social exchanges that appear. If a team member would not feel like information, knowledge, mistakes, or other things are appropriate to share, the team member will most likely not share it. If a team member would fear getting penalized for sharing mistakes that occurred or other things, the team member will probably not share this either. Thereby, Shao, Feng and Wang (2017) stated that a charismatic leader has a strong influence on the psychological safety, which is here defined as the people's perceptions of consequences of taking interpersonal risks in a context such as a workplace (Edmondson and Lei, 2014). Charismatic leaders tend to be transformational

according to Bass (1990). Edmonson and Nembhard (2006) also suggested that leader inclusiveness – words and deeds exhibited by leaders that invite and appreciate other’s contributions – predicts psychological safety (Edmondson & Nembhard, 2006). Therefore, as can be seen in figure 1, the following hypothesis is formulated:

H1: transformational leadership style is positively related to psychological safety in police teams.

Psychological safety is important for the police, because continuous talking about situations that occurred and committed crimes will help in coping with all emotions derived from it. Also, according to Van Hulst (2013), storytelling is crucial for an everyday police station life. Police teams must deal with crimes every day. These crimes can be murder, theft, kidnapping and so on. It is important to share information in police teams to support the conviction of criminals (Klerk, 2007). It is also important for members to share information and knowledge gained from cases to be able to handle situations and challenges that can occur in the future in their uncertain environment (Crank, 2014). According to Seba, Rowley and Lambert, psychological safety seems to have an impact on the attitude towards information sharing in a police culture (Seba, Rowley & Lambert, 2012). Research from Siemsen, Roth, Balasubramanian, and Anand (2009) also suggests that psychological safety is a predictor of information sharing. Psychological safety can (partly) explain why information is being shared in a police culture (Siemsen, Roth, Balasubramanian & Anand, 2009). The conceptual model (figure 1) shows the following hypothesis:

H2: Psychological safety is positively related to information sharing in police teams.

“Team learning is an ongoing process of reflection and action, characterized by asking questions, seeking feedback, experimenting, reflecting on results, discussing errors or (un) expected outcomes of actions” (Edmondson, 2002). In this research, processing information is added as characteristic of team learning (Groen & Rijgersburg, 2012). The regional police teams do not know in advance which situation will appear or which crimes will be committed. Every crime, and every situation can be different. When a crime is committed, and it is handed over to one of the police teams, the team needs to anticipate on that situation. According to Edmonson, teams will need to engage in learning behavior to understand the environment they are in (Edmondson, 1999). Psychological safety in teams allows members to be honest towards their colleagues and enables team learning (Edmondson, 1999). Earlier research of Horst (2016) in police teams already showed a positive relation between psychological teams and team learning, suggesting that police teams can learn from mistakes and create opportunities to improve future work, when mistakes are discussed. According to Van Hulst (2013), storytelling, which involves information sharing, helps officers to learn the craft of policing. Information sharing is thus needed to engage in learning behavior. As stated before, psychological safety is suggested to be a predictor of information sharing (Siemsen, Roth et al. 2009).

Combining this information leads to the following hypothesis (see figure 1):

H3: Psychological safety positively influences information sharing, which in turn affects team learning in police teams.

Glomseth, Gottschalk, and Solli-Saether (2007) argue that success of a police investigation is achieved if the team is successful in: 1) understanding problems and challenges; 2) finding investigation approaches; 3) choosing an investigation approach; 4) implementing the optimal investigation approach; 5) solving the problem. Each police team consists of coordinators, whom are mainly responsible for the first 3 points, and of executives, whom are mainly responsible for the last 2 points. To be able to be successful in all five points, information needs to be collected by asking questions such as: “Has there ever been a case like this before?”, “What strategy was used for that case and how much time, how many people and how much effort was needed then?”. It happens that a team employs an approach to try solving a case, but it turns out that the approach is not applicable for the situation. If this occurs, the situation needs to be reviewed to learn from it and to be able to choose and implement the optimal investigation approach next time. Team performance at the regional police is measured in the form of solved cases and detained suspects, meaning that the team needs to be eminent in all 5 points (Glomseth, Gottschalk & Solli-Saether, 2007). Besides that, processing relevant information in police systems can give the police the opportunity to find criminals sooner (Groen & Rijgersberg, 2012; Van der Veer, Roos & Van der Zanden, 2012). The following hypothesis is derived, shown in figure 1:

H4: Team learning is positively related to team performance in police teams.

3. METHOD

3.1 Sample and data collection

3.1.1 Quantitative research

Quantitative research is conducted by means of surveys. The variables that are discussed in the surveys differed per work function, and can be found in table 1. 48 team members filled in the survey (response rate = 62.34%), and 5 team leaders filled in the survey (response rate = 83.3%). The surveys were distributed on paper. In general, surveys on paper have a higher response rate than online surveys (Manfreda, Bosnjak, Berzelak, Haas, Vehovar & Berzelak, 2008). To increase confidentiality, the survey could be handed in, in an envelope, in a closed inbox. On the first page of the survey, respondents were informed about anonymity: no one at the regional police would get insight in the responses. Also, information about the objectives of the research is provided on the first page of the survey. Besides this, all teams were informed in team meetings on how anonymity will be preserved for them. Quantitative research is conducted to find an answer to the proposed hypotheses and to compare moderate performing and high performing teams in a police setting.

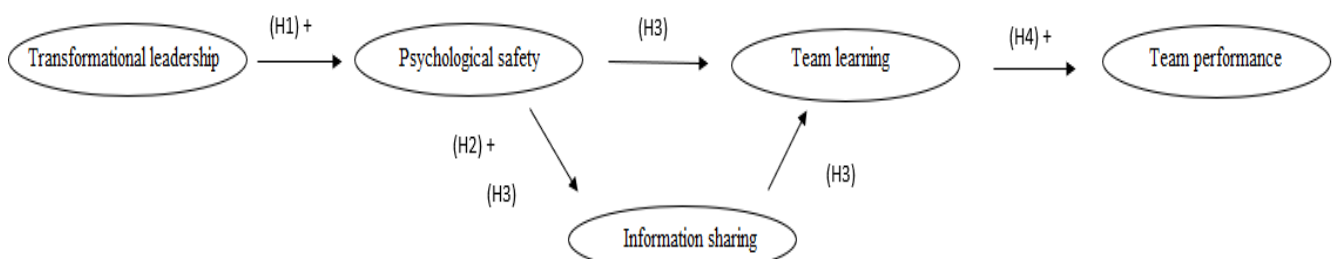


Figure 1: conceptual framework

Respondents	Survey variables
Team members	Leadership style of team leader
	Psychological safety in team
	Information sharing in team
	Team learning
	Task interdependence
Team leaders	Team performance of their team
	Leadership style of colleague team leaders

Table 1: survey variables

3.1.2 Qualitative research

Qualitative research was done in the form of interviews with all 6 team leaders (response = 100%). For topics discussed, see table 2. The qualitative results were used to identify differences between moderate and high performing police teams. Also, the interview was used to find an answer to the question: “what are unique characteristics of the regional police?”. Participants were asked to sign an informed consent form to show their agreement with recording the interview. After recording, the interviews were transcribed and sent per e-mail to the team leaders. When a team leader did not give permission to record the interview, the interview was typed out immediately. Semi-structured interviews were held, to assure reliability. Besides that, participants did not receive the interview questions upfront, to minimize the risk of social desirability. This risk refers to the fact the people tend to answer questions as to what they think that is perceived as favorable (Fisher, 1993).

Participants	Interview topics
Team leaders	Organizational work history
	Team structure
	Unique characteristics of regional police
	Task interdependence
	Leadership style
	Information sharing
	Contact with team members
	Cooperation with colleagues
	Impact of colleague operational experts' thoughts on leadership style

Table 2: interview topics

3.2 Measures

All items in the surveys were rated by respondents on a seven-point Likert scale ranging from 1 = ‘never’ to 7 = ‘always’. English constructs of which no translation was found, were translated to Dutch by an independent expert with the standard backward translation method (Brislin, 1970). This means that an independent person translated the constructs into the target language Dutch. Another person translated the constructs back into the original language. The variables were tested for reliability by means of Cronbach’s alpha. A scale with Cronbach’s alpha > 0.7 is indicated as acceptable (Nunnally, 1978)

3.2.1 Leadership style

Team members assessed their own team leader by use of the Multifactor Leadership Questionnaire of Avolio and Bass (1997). 19 items were used to measure the level of transformational leadership. For example, “My leader talks optimistically about the future”. Data from team members show on both individual and team-level high reliability ($\alpha =$

0.953). To examine transactional leadership, 4 items were used. For example, “My leader keeps track of mistakes”. The data from team members had a Cronbach’s α of 0.858. This shows a reliable scale.

3.2.2 Psychological safety

Psychological safety was measured with a 7-item questionnaire of Edmondson (1999). For example, “Members of this team are able to bring up problems and tough issues”. 3 items were reverse scored. For example, “It is difficult to ask members of this team for help”. At first, reliability of this scale could be considered as low ($\alpha = 0.436$). After the deletion of one item (“No one in this team would deliberately act in a way that undermines efforts”), Cronbach’s α is 0.707, which is acceptable.

3.2.3 Information sharing

Eight items were derived from a questionnaire of De Vries, van den Hooff and de Ridder (2006) to assess the level of information sharing. A translation was used from research of Dr. D.H. van Dun and Wilderom (2016). A sample item was “When someone in the team is good at something, team members ask this colleague to teach them how to do it”. Reliability of this scale was high ($\alpha = 0.971$).

3.2.4 Team learning

This was measured by items constructed by Edmondson (1999). A translation was used from unpublished research of Van Dun and Wilderom. For example, “In this team, someone always makes sure that we stop to reflect on team’s work processes”. Cronbach’s alpha of this scale was 0.851. This scale showed high reliability.

3.2.5 Team performance

Team leaders assessed the team performance of their own team by means of 4 items constructed by Edmondson (1999). A sample item is “This team meets or exceeds expectations”. One item was deleted, because it seriously impacted reliability (“this team regularly makes critical quality mistakes”). After deleting this item, Cronbach’s α was 0.946. Thus, reliability of this scale was high.

Per team, the absenteeism rate was provided. This could help to measure the total performance per team by seeing how it correlates with the performance rating of team leaders.

3.2.6 Control variables

Besides personnel information of the team (team member demographics and team size), information about task interdependence in the teams was gathered. Earlier research of Bachrach, Powell and Richey (2006) showed that interdependence has an indirect effect on team performance. Besides this, it was argued that task interdependence is a central aspect in teams for team functioning in terms of action processes, interpersonal processes and cohesion (Courtright, Thurgood, Stewart, & Pierotti, 2015). Therefore, task interdependence was added as control variables in this research. Task interdependence was measured by 3 items of Wageman, Hackman, and Lehman (2005). It showed a reliable scale ($\alpha > 0.7$). For example, “To get to results with the team, a lot of communication and coordination is necessary”.

3.3 Data analysis

3.3.1 Quantitative data

3.3.1.1 Consensus in teams

The level of consensus in teams for all variables was measured by Intraclass Correlation Coefficient (ICC) absolute agreement (2, k) (Shrout and Fleiss, 1979). ICC values less than 0.5 indicate poor reliability, values between 0.51 and 0.7 indicate

moderate reliability, values between 0.71 and 0.9 indicate good reliability, and values greater than 0.91 indicate excellent reliability (LeBreton & Senter, 2008). The results are presented in table 3. Four teams indicated moderate reliability, two teams indicated good reliability, and one team indicated excellent reliability in absolute agreement between members. All ICC values had a $p < 0.05$.

	ICC	k
Team A	0.922	8
Team B	0.696	8
Team C	0.629	5
Team D	0.610	9
Team E	0.727	8
Team F	0.829	4
Team G	0.562	5

Table 3: results of ICC absolute agreement

3.3.1.2 Normal distribution

Normal distributed variables are an important assumption for testing relations. Testing for normality was done by a Shapiro and Wilk test. This showed normal distribution for all variables ($p > 0.05$) (Ghasemi & Zahediasl, 2012). Besides this, the skewness z-value and kurtosis z-value were calculated (see table 4). Except for transformational leadership (skewness z-value=1.98), the z-values were between -1.96 and +1.96. Therefore, the variables were assumed to be normally distributed (HY, 2013). Transformational leadership was also assumed to be normally distributed, because kurtosis z-value and the Shapiro and Wilk test showed normality. Besides that, the skewness z-value was close to 1.96.

	Skewness z-value	Kurtosis z-value
Transformational leadership	1.98	1.87
Transactional leadership	0.50	-1.02
Psychological safety	0.45	-0.22
Information sharing	-1.42	0.89
Team learning	1.04	-0.47
Team performance	0	-1.13

Table 4: results normality test

3.3.1.3 Linear regression

Data was aggregated at team level ($n=7$). Variables were normally distributed. Therefore, linear regression was used to test the four hypotheses. Linear regression enables to express the relation between dependent and independent variables (Montgomery, Peck, & Vining, 2012). The four hypotheses proposed a positive direction, therefore linear regression was tested one-tailed by dividing the significance of beta by two. H1, H2, H3, and H4 were adopted if the p -value of the regression model and the beta is smaller than 0.05. Multicollinearity was checked between variables. Evidence for multicollinearity was assumed when the variance inflation factor (VIF) was > 2.5 or when tolerance was < 0.1 (Belsley, Kuh & Welsch, 2004). When necessary, control variables were added to the models. To test mediation (H3), a few steps were taken: 1) the relation between psychological safety and information sharing was tested for significance; 2) the relation between psychological safety and team learning was tested for significance; 3) the relation between information sharing and team learning was tested for significance. These steps are

necessary to identify a mediator (Verboon & Peels, 2014). If the abovementioned relations were significant, a fourth step was taken. This step involved adding psychological safety and information sharing in a model as predictors of team learning. Full mediation was assumed when the mediator information sharing was significant in this model, and psychological safety was not. Partial mediation is assumed when information sharing, and psychological safety were both significant in this model (Verboon & Peels, 2014).

3.3.1.4 Absenteeism rate and team performance

The absenteeism rate was tested for correlation with team performance. A negative correlation indicates that a low absenteeism rate was associated with high team performance. A positive correlation indicates that a high absenteeism rate was associated with high team performance.

3.3.1.5 Comparison of moderate performing teams and high performing teams

Median split was used to categorize teams into moderate performing teams and high performing teams. The median was calculated ($=5$) and any team with a value equal or below the median was categorized as a moderate performing team. Any team with a value above the median was categorized as a high performing team. The means per variable for the two types of teams were calculated. Then, independent samples t-test were used per variable to test significant differences between the two types of teams. First, Levene's test was used to check for equal variances. A p -value > 0.05 indicated that equal variances were assumed. Second, the t-test for equality of means was used. A p -value < 0.05 indicated that there were significant differences between the means.

3.3.2 Qualitative data

The transcripts of the interviews were used to analyze the interviews by means of coding. Two coding schemes were created, based on the outcomes of the quantitative data. These include: moderate performing teams and high performing teams. With the qualitative data, a separation is made between the two types of teams. Within the coding schemes, a distinction was made between subjects discussed during the interview: 1) leadership style; 2) psychological safety; 3) team learning; 4) information sharing; 5) team performance; 6) stability of the team. The results of this data were compared to the results of the quantitative analysis. Besides this, the transcripts of the interviews were analyzed to identify unique characteristics of the regional police.

4. RESULTS

4.1 Bivariate tests

A correlation matrix is presented in table 5. There was a positive significant correlation between transformational leadership and transactional leadership ($r=0.85, p < 0.05$). A positive significant correlation was found between psychological safety and information sharing ($r=0.93, p < 0.01$), as well as a positive significant correlation was found between psychological safety and team learning ($r = 0.89, p < 0.01$). A positive significant correlation between information sharing and team learning ($r=0.75, p < 0.05$). A positive significant correlation existed between team learning and team performance ($r=0.85, p < 0.05$). A negative significant correlation was found between gender and psychological safety ($r=-0.84, p < 0.05$). There was a positive significant correlation between stability and organizational tenure ($r = 0.80, p < 0.05$), as well as there was a positive significant correlation between task interdependence and organizational tenure ($r=0.84, p < 0.05$).

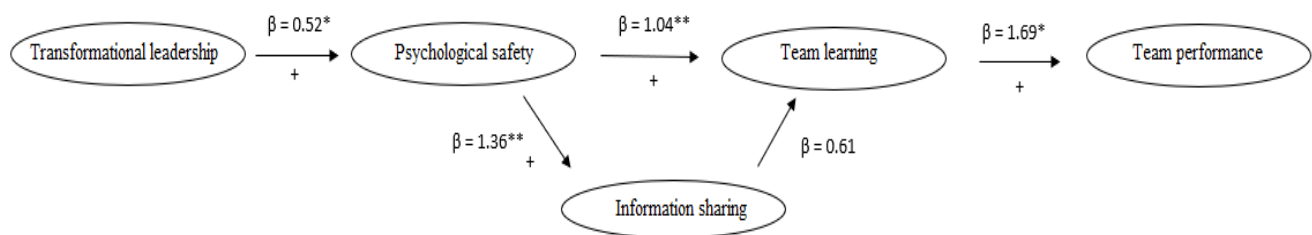
Correlation between the absenteeism rate per team and team performance was tested.

A strong negative correlation was found ($r=-0.8$). This correlation was not significant ($p>0.05$).

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Transformational leadership	4.91	0.56												
2. Transactional leadership	4.52	0.59	0.85											
3. Psychological safety	5.67	0.48	0.55	0.48										
4. Information sharing	5.20	0.71	0.64	0.62	0.93*									
5. Team learning	3.92	0.57	0.55	0.45	0.89*	0.75								
6. Team performance	5	0.85	0.64	0.35	0.72	0.52	0.85							
7. Size team	11	4.04	0.76	0.81	-0.07	0.12	0.02	0.08						
8. Age	3.61	0.31	0.22	0.13	0.69	0.63	0.72	0.82	-0.24					
9. Gender	1.49	0.25	-0.12	-0.16	-0.84	-0.75	-0.59	-0.41	0.47	-0.51				
10. Organizational tenure	2.06	0.63	0.04	-0.21	0.35	0.25	0.61	0.51	-0.17	0.29	-0.19			
11. Years in current job	1.51	0.35	0.41	0.24	-0.2	0.02	-0.05	-0.17	0.61	-0.1	0.34	0.59		
12. Stability	4.79	0.79	0.2	-0.19	0.53	0.31	0.68	0.68	-0.30	0.33	0.35	0.80	0.07	
13. Task interdependence	4.80	0.37	-0.02	0.13	0.49	0.42	0.68	0.25	-0.15	0.4	-0.35	0.84	0.15	0.53

Inter-correlations between dependent and independent variables are tested one-tailed. Inter-correlations with control variables are tested two-tailed. Bold correlations indicate significance at $p<0.05$. Bold * correlations indicate significance at $p<0.01$.

Table 5: correlation matrix



Note: * indicates significance at $p<0.05$. ** indicates significance at $p<0.01$.

Figure 2: final model

4.2 Linear regression

H1 proposed a positive relation between transformational leadership and psychological safety in police teams. This is backed by data, when controlling for task interdependence in teams ($\beta=0.52$, $p<0.05$). Task interdependence functioned as suppressor variable by increasing the influence of transformational leadership on psychological safety. There was no evidence found for multicollinearity ($VIF<2.5$, tolerance >0.1). H2 anticipated that psychological safety is positively related to information sharing in police teams. Results of linear regression confirmed this ($\beta=1.36$, $p<0.01$; $VIF <2.5$, tolerance >0.1). H3 proposed that information sharing acts as mediator between psychological safety and team learning in police teams. A significant relation was found between psychological safety and information sharing as stated above ($\beta=1.36$, $p<0.01$). A significant relation was also found between psychological safety and team learning ($\beta=1.04$, $p<0.01$; $VIF <2.5$, tolerance >0.1). Data did not show a direct significant relation between information sharing and team learning ($\beta=0.61$, $p>0.05$; $VIF<2.5$, tolerance >0.1). Therefore, H3 was not confirmed by data. At last, the relation between team learning and team performance (H4) was tested.

When controlling for task interdependence, a positive significant relation was found ($\beta=1.69$, $p<0.05$). Task interdependence functioned as suppressor variable, because the relationship between team learning and team performance turned significant and the influence of team learning on team performance was increased. There was no evidence of multicollinearity ($VIF<2.5$, tolerance >0.1). The final model with the mutual relations between the variables in police teams are presented in figure 2.

4.3 Comparison of moderate performing teams and high performing teams

In table 6, the means per variable per type of team and the results of the independent samples t-tests are presented. The independent samples t-test showed significant differences for the variables psychological safety ($df=3$, $t=-4.83$, $p <0.05$), and team learning ($df=3$, $t=-6.38$, $p<0.01$). In table 7, an overview is presented of the qualitative results.

Variables	Mean moderate performing teams	Mean high performing teams	t
Transformational leadership	4.63	5.38	-1.22
Transactional leadership	4.36	4.89	-0.86
Psychological safety	5.25	6.26	- 4.83*
Information sharing	4.59	5.89	-2.74
Team learning	3.49	4.67	-6.38**

Note: * indicates significance at $p < 0.05$. ** indicates significance at $p < 0.01$

Table 6: quantitative comparison of teams

Leaders of moderate and high performing teams both showed presence of transformational leadership traits in their work style, their ways of motivating team members and their problem-solving approach. During the interviews, team leaders of moderate performing teams described more transactional leadership traits than leaders of high performing teams. This is different than the outcome of the quantitative analysis, which showed that the leaders of high performing teams had the highest scores on transactional leadership.

Following the team leader's perceptions, the moderate and high performing teams have a good level of psychological safety. Business and personal matters can be discussed within the team. Though, it is mentioned by team leaders of moderate performing teams that team members do not always feel that there is room to discuss personal issues. Therefore, the psychological safety is assumed to be a bit lower for those teams. Personal matters are most often only discussed when someone asks for it, or in team meetings that are specifically set up to discuss these matters. Quantitative data also showed that high performing teams had the highest scores on psychological safety.

Team leaders of the two types of teams stated that team members get necessary information in some way. Information is shared in meetings, in individual conversations, per e-mail, by WhatsApp, or it can be found on a whiteboard. In moderate performing teams, information is not always shared by the team leaders. Information is also shared by a little group of team members. Aligned with the outcomes of the quantitative data, moderate performing teams showed a lower level of information sharing. It was indicated by team leaders of moderate performing teams that they share all necessary information with team members in a way, but that team members do not always share all (relevant) information with the team leaders of other team members.

Moderate performing teams showed in the quantitative analysis that they have a lower level of team learning. In the interviews, it was argued by team leaders that in some moderate performing teams giving and receiving feedback is difficult, which could also signal that there is a lower level of team learning. Besides that, it was mentioned that information is not always processed properly.

During the interviews, it was noticed that there are often changes in team composition of the police teams. Team leaders mentioned that these changes are caused by a lack of the right knowledge, capabilities and expertise in teams. Also, occasionally, the regional police department is obliged to cede a few members away to large-scaled investigation teams (TGO).

4.4 Characteristics of the regional police

Team leaders described the regional police as dynamic and chaotic. Team leaders also argued that there is little overview. Where the teams do not have a lot of cases to work on at one day, the teams can have more than 10 cases to solve the other day. Therefore, the teams tend to get swayed by the issues of the day, not looking at the greater picture. Besides this, each case and every situation unique according to the team leaders. The dynamic environment asks for a creativity, as stated by team leaders. Per crime committed, scenarios and hypotheses need to be made. This asks for out of the box thinking. Besides the scenarios and hypotheses, also an approach needs to be defined per case. Teams see it as their goal to solve a crime as fast as possible. Therefore, teams tend to jump into a case directly. In the regional police teams, the team leaders described the connection between team members as unique. It was argued that team members feel more connected towards their other team members since they are working in separate teams. Before the introduction of teams, the team members felt less connected to colleagues. Team members in a team are going through same things, and are engaged in the same work. Sometimes, that work is quite fierce.

		Moderate performing teams	High performing teams
Leadership	<i>Work style</i>	Leadership style is based on honesty, good communication and mostly people-oriented. In some situations, a leader can come across clear, and can be a bit severe.	Based on trust, respect and honesty.
	<i>Motivation</i>	Motivation is done by emphasizing importance of the work that needs to be done, through individual conversations with members, and by listening to the team members.	Motivation is mostly done through talking. Team members are also informed on what the team leader is doing, to create team-members involvement. The team will be complimented when good work is done.
	<i>Problem solving approach</i>	Team leaders are checking team members work for possible errors. Team leaders try to find out where a problem lies and try their best to solve the problem: either with individuals or in the team. If necessary, the team leaders speak tightly to individual members.	Problems will be discussed to find where its coming from and to seek for a solution.
Psychological safety	<i>Mistakes and occurring problems</i>	If problems occur, team members can come to the team leader to seek for a solution.	Team members feel safe enough to talk to the team leader if any mistakes or problems during work occur.
	<i>Personal issues</i>	There is room to discuss personal issues in private conversations. Personal issues can also be discussed in briefings if there is time. This does not happen that often.	There is always room to discuss personal issues according to the team leaders, either in a team meeting or personal conversation.
	<i>Matters discussed between members</i>	At the coffee machine, both business and private matters are discussed.	During briefings and at the coffee machines, both business and private issues are discussed.
Information sharing		Team members will get information needed. This happens in briefings, via WhatsApp, a simple whiteboard or via e-mail. In some cases, information is shared on an individual level. Information is not necessarily shared by the team leader. It is sometimes shared by a member of the team.	All team members will get the information necessary somehow: briefing, e-mail, WhatsApp and/or whiteboard is used to share information.
Team learning		Team leaders coach team members. Occurring problems are discussed. If it lies with an individual, the problem will be discussed with that individual. If not, it will be discussed with the whole group. Some teams are currently looking to improve team learning. Giving and receiving feedback can be difficult in some teams.	The teams are coached by the leader. Occurred problems are discussed, and work is sometimes feedbacked to find out what can be improved. Most often, this happens in the group.
Stability		Changes in team composition occur regularly.	Little to no changes in team composition.
Task interdependence		There is interdependence of tasks in the teams.	Team members are interdependent in their tasks.

Table 7: qualitative comparison of teams

5. DISCUSSION

The characteristics of the regional police described by the team leaders were in line with previous described characteristics of the regional police in work of Klerks, Huisman, Princen, and Kop (2016), Crank (2014), Klerks (2007) and Reuss-Ianni (1983).

Transformational leadership is shown in this research to be positively related to psychological safety in police teams. This coincides with previous work of Shao, Feng, and Wang (2017), and work of Edmondson and Nembhard (2006). In this research it is shown that high performing police teams have leaders that are both transformational and transactional. This corresponds with research of Blaauw, Schaveling, and van Montfort (2017), in which it was argued that a combination of leadership styles is important. A combination of transformational and transactional leadership will motivate team members, give them a sense about the importance of their work and ensure that team members know what work they need to do and how to do that work by defining tasks and goals.

In this research, psychological safety is shown to be positively related to information sharing in police teams. This is in line with previous work of Seba, Rowley, and Lambert (2012) and previous work of Siemsen, Roth, Balasubramanian, and Lambert (2009). Psychological safety is also shown to be positively related to team learning in police teams, when mediation was tested. This corresponds with earlier research of Horst (2016). The high performing police teams in this research showed high psychological safety. Arguably, psychological safety has an indirect effect on team performance. The level of information sharing, and team learning will be higher when team members feel safe in their team. In turn, team learning influences team performance.

In this research, no evidence was found that information sharing acts as mediator between psychological safety and team learning, because information sharing did surprisingly not show to act as predictor of team learning in police teams. This might come from the content of the information that is shared. Groen and Rijgersberg (2012) suggested that there is information overload in police teams. Some cases are not solved because of a lack in sharing and/or processing relevant information. Overload makes it difficult to process and use relevant, and sometimes crucial information. Information sharing will only lead to team learning, if relevant information is shared (Groen & Rijgersberg, 2012). In the current research, high performing teams showed a high level of information sharing. Arguably, the content of the information shared is not always relevant. Presumably, sharing of relevant information has a direct effect on team performance of police teams. In the previous example, performance could have been better if the information about multiple drug incidents was used. In that case, another approach was adopted by investigating the stab incident and other crimes related to the crime offenders.

Team learning is shown to be positively related to team performance, which coincides with earlier research of Glomseth, Gottschalk, and Solli-Saether (2007). Team learning is shown in this research to be important for high team performance. Although each case is indicated as unique by team leaders, it is possible to learn from past cases. For example, by processing relevant information of past cases, approaches, and criminals. Data mining is a system that enables police officers to easily recognize patterns, to make predictions, to discover connections, to identify criminal networks, and to recognize criminals based on earlier processed information (Van der Veer, Roos & Van der Zanden, 2009). The processed information is accessible for all police teams that make use of

the data system. The data mining system makes use of an associative search tool and already showed to be successful. Results of an experiment with witnesses show that there were 50% more recognized criminals than with the traditional police system (Van der Veer, Roos & Van der Zanden, 2009). The use of such a system creates opportunities for police teams to exceed expectations by solving cases and arresting criminals (fast).

Although stability was not part of the initial model, it was found that there are changes in team composition. Previous work found that changes in team composition on a regular basis are undesirable, because it can decrease the psychological safety and information sharing on short term (Savelsbergh, 2010). In the beginning, new team members might not feel free yet to open up towards other team members, feel safe to discuss errors in the team, or feel free to share information (Edmondson and Lei, 2014; Savelsbergh, 2010). Team stability also strongly influences team learning (Savelsbergh, Poell, & Heijden, 2015) and team performance (Edmondson, Winslow, Bohmer, & Pisano, 2003). Good collaboration and results in teams can only occur when team members know the team practice well (Edmondson, Winslow, Bohmer, & Pisano, 2003). In the current research, police teams with less stability scored lower on psychological safety, information sharing and team learning.

5.1 Limitations

This research gives some interesting insights into team performance and related variables in a police setting, but it is also limited by some factors.

A limitation is the response rate. 48 responses were collected (62,34%). Thereby, some responses had missing data. With the introduction of the 'development team' in 2017, team members faced uncertainty in terms of potential upcoming changes. In all openness, the 'development team' was thinking about merging teams. Not all team members wanted changes in the organizational structure, because they were satisfied with the current team compositions. The potential changes caused dissatisfaction by some team members. It is possible that the low response rate was due to the dissatisfaction. Team members argued that the 'development team' would draw their own conclusion of this research and that they thus did not want to participate in this research. Respondents also mentioned, more than once, a lack of trust to the higher levels in the organization. In research of Reuss-Ianni (1983), it was argued that the police have a culture of its own, consisting of two subcultures: 1) culture of the executing people in police settings; 2) culture of the management. This culture was formed due to a growing orientation of the management to management issues, the greater need for external accountability, and the increasing political sensitivity of the police. It was said in the study of Reuss-Ianni (1983) that the executives in police settings attach the greatest value to direct action and solidarity to colleagues. As mentioned in the research of Reuss-Ianni (1983) and by team members of the regional police, the management stands too far from the actual work and is therefore distrusted.

Besides the low response rate, there was another limitation concerning the sample size. Data was aggregated at team level ($n = 7$). The sample size was small, and this can result in a type 2 error. A type 2 error occurs when the null hypothesis is untruly adopted. A greater sample size reduces the chance of a type 2 error. The same study with a greater sample size can give different results. For example, with a greater sample size, H3 might be accepted. On the other hand, this means that it is interesting that the alternative hypothesis 1, 2, and 4 were significant at $p < 0.05$.

Another limitation to this research was a potential nonresponse bias. Nonresponse bias indicates that the nonresponse might throw your results off or even invalidate them completely (Glen, 2015). There was a survey designed for the management of the regional police. In this survey, the management was asked to rate the team performance of all teams by the same items as the team leaders. Also, the management was asked in this survey to provide the Key Performance Indicators (KPI's) of the regional police teams. There was a response rate of 0%. The management was afraid that answers would be traceable and despite effort, this fear was not taken away. It can be argued that the management had a different view on the team performances than the team leaders. Reuss-Ianni suggested that the management stands far away from the actual work and that the management is more concerned with management issues and external accountability. Zaleski (1992) argued that managers have a passive attitude towards objectives and that the managers see work only as a process to reach objectives. Team leaders on the other hand, have an active attitude towards objectives, where they use all their energy to motivate the executive people. With the responses of the management, the results of the team performance of the police teams per team could have been different. Besides, that the Key Performance Indicators were not provided. The team performance was thus not measured by current metrics of the regional police itself. It was measured only by means of 4 items. Also, not all teams were rated by their team leaders. Those teams were not used to compare moderate performing teams and high performing teams.

In this research, team leaders were asked to assess colleague team leaders to see whether there are differences in opinion with the team members. To respect the wishes of team leaders, the analysis of these responses was left out. Due to the small sample size, anonymity could not be preserved.

As last, there was a limitation in this research concerning the measure of stability. Initially, stability was measured in the quantitative interview by two items designed by Wageman, Hackman, and Lehman (2005). For example: "This team is stable, with few changes in composition". Primarily, stability was supposed to be used as control variable in this research, because Linn and Reilly indicated that stability of team is one of the metrics that has an indirect effect on team performance (Lynn & Reilly, 2016). It was pointed out by respondents that such items are more applicable to investigation teams instead of the general teams. Some respondents indicated that they filled in these items for investigation teams. For research in a police setting, it is recommended to define what is meant by a team, to avoid any misunderstandings. Because it was untraceable which team members filled the items in about the investigation teams and which team members filled the items in about their general team, it was decided to remove this part of the quantitative research. The stability in this research was measured only by qualitative data. Based on the qualitative data, it was found that there occasionally are changes in the team compositions. It was not possible to test if the stability of the police teams influences psychological safety, information sharing, team learning, and team performance.

5.2 Conclusion and implications

This research adds insights into the mutual relations of transformational leadership, psychological safety, information sharing, team learning, and team performance. In this research, was showed that the higher the level of the transformational leadership, the higher the level of psychological safety in police teams. This research also found that the higher the level of psychological safety, the higher the level of information

sharing in police teams. This research did not show that information sharing predicts team learning in police teams and it therefore did not show that information sharing mediates between psychological safety and team learning. A reason for this can be that not all information that is shared and processed in police teams is relevant due to information overload.

Team leaders and team members must consider the content of information sharing for cases, because sharing of relevant information can lead team learning. Another reason could be a type 2 error. Testing with a greater sample size might give different results. This research found that a higher level of team learning results in better team performance. Characteristics of high performing police teams are identified in this research. In this research, high performing police teams have leaders that are both transformational and transactional, high psychological safety, information sharing, and team learning. Also, stability is assumed to be a factor that influences team performance. Team leaders of the police teams must consider starting conversations in which personal matters are discussed more often, because team members indicated that they do not always feel free to discuss personal matters. If the team leader stimulates discussing personal matters more, this can increase psychological safety. The police teams must consider searching for opportunities to improve team learning. For example, providing feedback more often and by the introduction of new technology such as a data mining system, which enables associative searching. This can improve team performance. Last, this research suggestion that stability impacts team performance must be considered by the regional police. As shown in research in other settings, more stable teams create opportunities to improve psychological safety, information learning, team learning and eventually team performance. The regional police can create stable teams by educating people in current teams. This will cost time and money. Another way to create stable teams is to reorganize teams so that every team possesses the right capabilities and expertise. Here, it must be considered that on short term this can drastically decrease psychological safety, information sharing, team learning, and team performance.

5.3 Future studies

It is interesting for future studies to include multiple regional police departments.

For future studies, it is recommended to test if stability influences psychological safety, information sharing, team learning and team performance in police teams. Team performance can be measured by the Key Performance Indicators, and the four items of Edmondson (1999) that is used in this research. Considering previous work in other settings, stability is expected to influence psychological safety, information sharing, team learning and team performance in police teams (Savelsbergh, 2010; Savelsbergh, Poell, & Heijden, 2015; Edmondson, Winslow, Bohmer, & Pisano, 2003). A model for this is presented in figure 3.

It is recommended to research if the leadership style of the management of regional police departments impact psychological safety and information sharing. There was a low response rate due to a fear that management can get insight in the answers and a lack of trust in higher levels of the organization, which indicates that the leadership style of the management might influence psychological safety and perhaps also information sharing at organizational level. It is also recommended to test for a relationship between information sharing, team learning and team performance. It is important to focus on the content and relevance of information that is being shared. The performance can be measured at department level.

Key Performance Indicators, such as solving percentages and arrest rates must be used as separate metrics for performance. Besides those rate, the four items used in this research must be included as a metric for performance. A model for this is presented in figure 4.

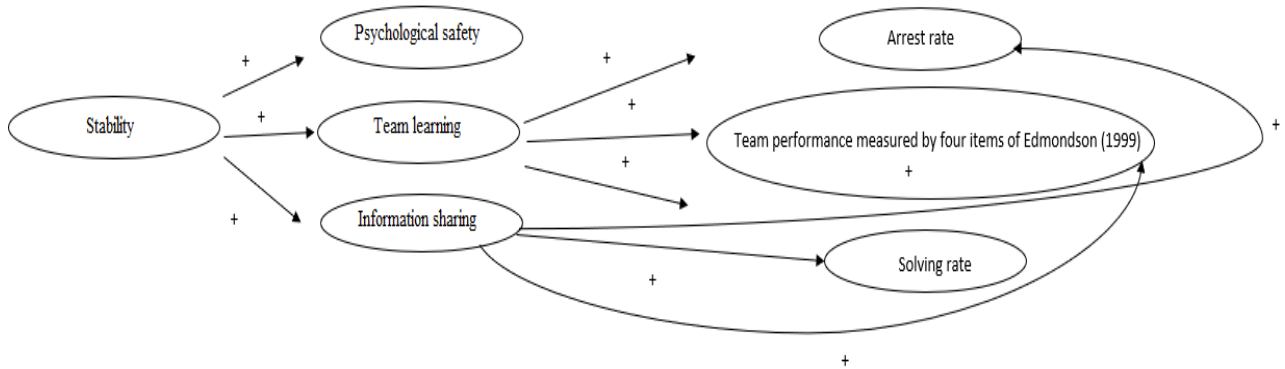
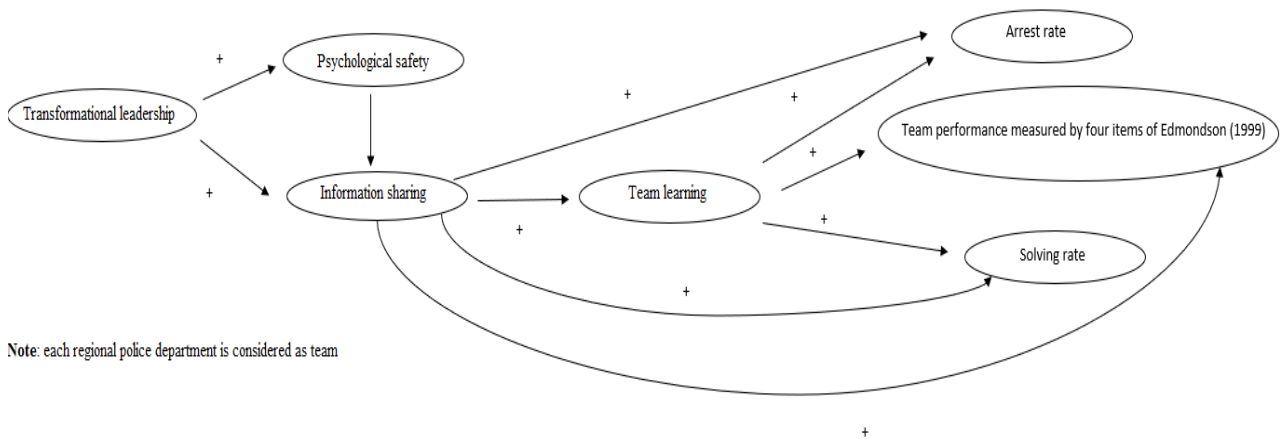


Figure 3: model for future studies on team level at the regional police department



Note: each regional police department is considered as team

Figure 4: model for future studies at regional police departments

6. REFERENCES

- Bachrach, D., Powell, B., Collins, B., and Richer, R. (2006). Effects of task interdependence on the relationship between helping behavior and group performance. *The Journal of Applied Psychology, 91* (6), 1396-1405. doi: <http://dx.doi.org/10.1037/0021-9010.91.6.1396>.
- Bass, B.M. (1990). From transactional to transformational leadership: learning to share the vision. *Organizational Dynamics, 18* (3), 19-31. doi: [https://doi.org/10.1016/0090-2616\(90\)90061-S](https://doi.org/10.1016/0090-2616(90)90061-S).
- Bass, B. M., & Avolio, B. J. (1997). *Full range leadership development: Manual for the Multifactor Leadership Questionnaire* (43-44). Palo Alto, CA: Mind Garden.
- Blaauw, S., Schaveling, J., and van Montfort, K. (2012). Prestatie, leiderschap en teamfunctioneren bij de politie. *M&O: Journal of Management and Organisation, 51*-69.
- Brislin, R.W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology, 1* (3), 185-216. doi: <https://doi.org/10.1177/135910457000100301>.
- Belsley, D.A., Kuh, E., and Welsch, R.E. (2004). *Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*. Wiley.
- Courthright, S., Thurgood, G., Stewart, G.M., and Pierotti, A. (2015). Structural interdependence in teams: An integrative framework and meta-analysis. *The Journal of Applied Psychology, 100* (6), 1825-1846. doi: <http://dx.doi.org/10.1037/apl0000027>.
- Crank, J.P. (2014) *Understanding Police Culture* (2nd edition). New York, USA: Routledge
- Decuyper, S., Dochy, F., and Van den Bossche, P. (2010). Grasping the dynamic complexity of team learning: an integrative model for effective team learning in organisations. *Educational Research Review, 5* (2), 111-133. doi: <http://dx.doi.org/10.1016/j.edurev.2010.02002>.
- De Groot, T., Kiker, D.S., and Cross, T.C. (2000). A Meta-Analysis to Review Organizational Outcomes Related to Charismatic Leadership. *Canadian Journal of Administrative Sciences, 17* (4), 356-372. doi: <http://dx.doi.org/10.1111/j.1936-4490.2000.tb00234.x>.
- De Vries, R.E., Van den Hooff, B., and De Ridder, J.A.

- (2006). Explaining knowledge sharing: the role of team communication styles, job satisfaction, and performance beliefs. *Communication Research* 33 (2), 115-135. doi: <https://doi.org/10.1177/0093650205285366>.
- Edmondson A.C. (1999). Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*, 44 (2), 350-383. doi: <https://doi.org/10.2307/2666999>
- Edmondson, A.C. (2002). The local and Variegated Nature of Learning in Organizations. A Group-Level Perspective. *Organization Science*, 13(2), 128-146. doi: <http://dx.doi.org/10.1287/orsc.13.2.128.530>
- Edmondson A.C. and Lei, Z. (2014) Psychological safety: the history, Renaissance, and Future of an Interpersonal Construct. *Annual review of organizational psychology and organizational behavior*, 1, 23-42. doi: <https://doi.org/10.1146/annurev-orgpsych-031413-091305>.
- Edmondson A.C. and Nembhard, I.M. (2006). Making it safe: the effects of leader inclusiveness and professional status on psychological safety and improvement effort in health care teams. *Journal of Organizational Behavior*, 27 (7), 941-966. doi: <http://dx.doi.org/10.1002/job.413>.
- Edmondson A.C., Winslow, A., Bohmer, R., and Pisano, G. (2003). Learning How and Learning What: Effects of Tacit and Codified Knowledge on Performance Improvement Following Technology. *Decision Sciences*, 34 (2), 197-224. doi: <http://dx.doi.org/10.1111/1540-5915.02316>
- Fisher, R.J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research*, 20 (2), 303-315. Doi: <https://doi.org/10.1086/209351>
- Ghasemi, A. and Zahediasl, S. (2012). Normality Tests for Statistical Analysis: A guide for Non-Statisticians. *International Journal of Endocrinology and Metabolism*, 10 (2), 486-489. doi: <10.5812/ijem.3505>
- Glen, S. (2017, 12 October). Statistics how to: Non-Response Bias. Retrieved from <http://www.statisticshowto.com/non-response-bias/>.
- Glomseth, R., Gottschalk, P., and Solli-Saether, H. (2007). Occupational culture as determinant of knowledge sharing and performance in police investigations. *International Journal of the Sociology of Law*, 35 (2), 96-107 .doi: <https://doi.org/10.1016/j.ijls.2007.03.003>.
- Groen, L.D. and Rijgersberg, T. (2012). Informatie overload in de politiepraktijk. Een verkenning van de problematiek en de mogelijke oplossingen van informatie overload bij handhaving en opsporing. Retrieved on November 30, from <https://repository.tudelft.nl/view/tno/uuid:87c7ddd7-31bc-4a33-8fd4-faf14f1950f1/>.
- Horst, M.L. (2016). Crossing boundaries: identifying antecedents of intra- and inter team learning processes in the Dutch Criminal Justice System. Retrieved on November 30, from <http://essay.utwente.nl/69757/1/Horst%20ter%20M.%20-%20S1028162%20-%20masterscriptie.pdf>.
- Huisman, S., Princen, M., Klerks, P., and Kop, N. (2016). Handelen naar waarheid: sterkte- en zwakteanalyse van de opsporing. Retrieved on November 22, from www.politieacademie.nl
- HY, K. (2013). Statistical notes for clinical researchers assessing normal distribution using skewness and kurtosis. *Restor Dent Endod*, 38 (1), 52-54. doi: <http://dx.doi.org/10.5395/rde.2013.38.1.52>.
- Joseph, A.S. (2009). Developing effective leadership in policing: perils, pitfalls, and paths forward. *Policing: An International Journal of Police Strategies & Management*, 32 (2), 238-260. doi: <http://dx.doi.org/10.1108/13639510910958163>.
- Klerks, P. (2007). Recherchewerk: effectief handelen in een complexe omgeving. Retrieved on November 23, from www.politieacademie.nl.
- Lynn, G., and Reilly, R.R. (2016). Measuring team technology performance. *Journal of Research Technology Management*, 43 (2), 48-56. doi: <https://doi.org/10.1080/08956308.2000.11671341>.
- LeBreton, J.M. and Senter, J.L. (2008). Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods*, 11 (4), 815-852. doi: <https://doi.org/10.1177/1094428106296642>
- Lund research LTD. (2013). Laerd Statistics: one-way ANOVA in SPSS Statistics. Retrieved on November 22, from <https://statistics.laerd.com/spss-tutorials/one-way-anova-using-spss-statistics.php>
- Manfreda, K., Bosnjak, L., Berzelak, J., Haas, I., Vehovar, V., and Berzelak, N. (2008). Web surveys versus other survey modes: a meta-analysis comparing response rates. *Journal of the Market Research Society*, 50 (1), 79.
- Moore, M.H. and Braga A. (2003). Measuring and improving police performance: the lessons of Compstat and its progeny. *An International Journal of Police Strategies & Management*, 26 (3), 439-453. doi: <https://doi.org/10.1108/13639510310489485>.
- Montgomery, D.C., Peck, E.A., and Vining, G.G. (2012). *Introduction to linear regression analysis* (5th edition). Wiley.
- Nunnally, J.C. (1978). *Psychometric Theory* (2nd edition). New York, USA: McGraw-Hill.
- Reuss-Ianni, E., (1983). *Two Cultures of Policing: Street Cops and Management Cops*. New Jersey: Transaction Publishers.
- Savelsbergh, C.M. (2010). *Team learning behaviors, role stress and performance in project teams* (Phd dissertation) Tilburg, the Netherlands.
- Savelsbergh, C.M., Poell, R.F., and Heijden, B.I. (2015). Does team stability mediate the relationship between leadership and team learning? An empirical study among Dutch project teams. *International Journal of Project Management*, 33 (2), 406-418. doi: <https://doi.org/10.1016/j.ijproman.2014.08.008>
- Seba, I., Rowley, J., and Lambert, S. (2012). Factors affecting attitudes and intentions towards knowledge sharing in the Dubai Police Force. *International Journal of Information Management*, 32 (4), 372-380. doi: <http://doi.org/10.1016/j.ijinfomgt.2011.12.003>.
- Shao, Z., Feng, Y.Q., and Wang, T.A. (2017). Charismatic leadership and tacit knowledge sharing in the context of enterprise systems learning: the mediating effects of psychological safety climate and intrinsic motivation. *Behavior & Information Technology*, 36

- (2), 194-208. doi:
<http://dx.doi.org/10.1080/0144929x.2016.1221461> .
- Shrout, P.E. and Fleiss, J.L. (1979). Intraclass correlations: uses in assessing rater reliability. *Psychological bulletin* 86 (2), 420-428. doi:
<http://dx.doi.org/10.1037/0033-2909.86.2.420>.
- Siemsen, E., Roth, A. V., Balasubramanian, S., and Anand, G. (2009). The influence of Psychological Safety and Confidence in Knowledge on Employee Knowledge Sharing. *Manufacturing and Service Operations Management*, 11 (3),429-447. doi:
<http://dx.doi.org/10.1287/msom.1080.0233>
- SPSS Handboek. (n.d.). Independent Samples T-Test. Retrieved on November 23 from
https://spsshandboek.nl/independent_samples_t-test/
- Statistiekbegeleider.nl (n.d.). Type 1 en type 2 fout. Retrieved on November 23, from
<http://www.statistiekbegeleider.nl/type-1-en-type-2-fout/>
- Terpstra, J. (2009) Politiecultuur en politiepraktijken. Empirische en theoretische kantttekeningen bij een kernbegrip. In Meershoek, G. *Politiestudies: terugblik en vooruitzicht. Een bundel essay voor Kees van der Vijver* (133-152). Dordrecht, Nederland: Stichting Maatschappij, Veiligheid en Politie.
- Van Dun,, D.H. and Wilderom C.P.M. (2016). Lean team effectiveness through leader values and members' informing. *International Journal of Operations & Production Management*, 36 (11), 1530-1550. doi:
<http://dx.doi.org/10.1108/IJOPM-06-2015-0338>.
- Van Hulst, M. (2013). Storytelling at the Police Station: The Canteen Culture Revisited. *Journal of Criminology*, 53 (4), 624-642. doi:
<https://doi.org/10.1093/bjc/azt014>
- Verboon, P., and Peels, D. (2014). Mediatieanalyse. Retrieved on November 15, from
https://s3.amazonaws.com/academia.edu.documents/50652434/Multilevel_Analyse.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1513433646&Signature=VxHUTP9ArRRr3Z0GYuXRf6d13BA%3D&response-content-disposition=inline%3B%20filename%3DMultilevel_Analyse.pdf
- Van der Veer, R.C.P., Roos, H.T., van der Zanden, A. (2009). Datamining voor Informatie Gestuurde Politie. In *Proceedings of the 15th ACM SIGKDD International Conferences on Knowledge Discovery and Data Mining* (26-29).
- Wageman, R., Hackman, J., Lehman, E. (2005). Team Diagnostic Survey: Development of an instrument. *The Journal of Applied Behavioral Science*, 41 (4), 373-398. doi:
<https://doi.org/10.1177/0021886305281984>
- Zaleznik, A. (1992). Managers and leaders: are they different? *Harvard Business Review* 70 (2), 126-135.

7. APPENDIX

7.1 Survey team members

Wat is uw leeftijd? Kies hieronder de leeftijdscategorie waar u onder valt door het juiste vak aan te kruisen.

18 - 25	26 - 35	36 - 45	46 - 55	56 - 65	> 65
---------	---------	---------	---------	---------	------

Wat is uw geslacht?

Hoe lang bent u al in dienst bij [REDACTED] Kruis het vak aan wat op u van toepassing is.

0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	> 26
-------	--------	---------	---------	---------	------

Hoe lang werkt u al in uw huidige functie bij [REDACTED] Kruis het vak aan wat op u van toepassing is.

0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	> 26
-------	--------	---------	---------	---------	------

In welk team zit u?

Het eerste gedeelte van de vragenlijst zal gaan over de leidinggevende van het team waar u in zit. Geef per uitspraak aan in welke mate u het er mee eens bent. LET OP: U kunt slechts één antwoord kiezen.

1 Nooit	2 Sporadisch	3 Af en toe	4 Regelmatig	5 Dikwijls	6 Heel vaak	7 Altijd
------------	-----------------	----------------	-----------------	---------------	----------------	-------------

Mijn leidinggevende...

... maakt mij trots dat ik mag samenwerken met hem/haar	1	2	3	4	5	6	7
... vindt het groepsbelang belangrijker dan het eigenbelang	1	2	3	4	5	6	7
... gedraagt zich op een respectvolle wijze naar mij en roept sterk vertrouwen op	1	2	3	4	5	6	7
... spreekt regelmatig over de belangrijkste waarden en normen	1	2	3	4	5	6	7
... benadrukt het belang van de duidelijke doelen	1	2	3	4	5	6	7
... heeft aandacht voor de ethische en morele consequenties van besluiten	1	2	3	4	5	6	7
... benadrukt het belang van het hebben van een gezamenlijke missie	1	2	3	4	5	6	7
... spreekt optimistisch over de toekomst	1	2	3	4	5	6	7
... spreekt enthousiast over wat er gerealiseerd moet worden	1	2	3	4	5	6	7
... draagt een overtuigende toekomstvisie uit	1	2	3	4	5	6	7
... straalt vertrouwen uit dat de doelen behaald zullen worden	1	2	3	4	5	6	7
... stelt vragen met betrekking tot belangrijke veronderstellingen	1	2	3	4	5	6	7

... zoekt verschillende invalshoeken bij het oplossen van problemen	1	2	3	4	5	6	7
... laat mij problemen bekijken vanuit verschillende invalshoeken	1	2	3	4	5	6	7
... suggereert nieuwe mogelijkheden om naar de taakuitvoering te kijken	1	2	3	4	5	6	7
... besteedt tijd aan begeleiding en coaching	1	2	3	4	5	6	7
... behandelt mij meer als individu dan slechts als lid van het team	1	2	3	4	5	6	7
... heeft oog voor het feit dat ik verschillende behoeften, mogelijkheden en aspiraties heb in vergelijking tot anderen	1	2	3	4	5	6	7
... helpt mij om mijn sterke kanten te ontwikkelen	1	2	3	4	5	6	7
... ondersteunt mij in ruil voor mijn inspanningen	1	2	3	4	5	6	7
... vestigt de aandacht op onregelmatigheden en fouten	1	2	3	4	5	6	7
... houdt fouten goed in de gaten	1	2	3	4	5	6	7
... is waakzaam ten aanzien van het niet behalen van doelstellingen	1	2	3	4	5	6	7

Het tweede deel van deze vragenlijst gaat over het team waar u inzit. Geef per uitspraak aan in welke mate u het er mee eens bent. LET OP: U kunt slechts één antwoord per vraag kiezen.

1	2	3	4	5	6	7
Nooit	Sporadisch	Af en toe	Regelmatig	Dikwijls	Heel vaak	Altijd

Teamleden waarderen de unieke vaardigheden en talenten van anderen	1	2	3	4	5	6	7
Teamleden kunnen problemen en moeilijke onderwerpen naar voren brengen	1	2	3	4	5	6	7
Niemand in ons team zou bewust iemand anders in de wielen rijden	1	2	3	4	5	6	7
In ons team liggen sommige medewerker niet goed in de groep, omdat ze anders zijn	1	2	3	4	5	6	7
In ons team durft men risico's te nemen	1	2	3	4	5	6	7
Het is moeilijk om anderen om hulp te vragen in ons team	1	2	3	4	5	6	7
Als iemand in ons team een fout maakt, dan wordt dit vaak tegen hem/haar gebruikt	1	2	3	4	5	6	7
We nemen regelmatig de tijd om manieren te bedenken die ons werkproces verbeteren	1	2	3	4	5	6	7

Ons team is geneigd om meningsverschillen persoonlijk af te handelen, in plaats van het meteen in de groep aan te pakken	1	2	3	4	5	6	7
Teamleden gaan uit om alle informatie die ze kunnen, te verkrijgen van anderen, zoals andere delen van de organisatie	1	2	3	4	5	6	7
Ons team zoekt regelmatig nieuwe informatie waardoor we belangrijke veranderingen maken	1	2	3	4	5	6	7
In ons team is er altijd iemand die ervoor zorgt dat we stoppen om te praten over het werkproces van het team	1	2	3	4	5	6	7
Mensen in dit team spreken zich regelmatig uit om aannames ter discussie te stellen	1	2	3	4	5	6	7
We nodigen mensen van buiten het team uit om informatie te delen of een discussie met ons te voeren	1	2	3	4	5	6	7
Mensen in dit team worden graag op de hoogte gehouden van wat teamgenoten weten	1	2	3	4	5	6	7
Wanneer teamleden bepaalde kennis nodig hebben, vragen zij anderen in het team daarnaar	1	2	3	4	5	6	7
Teamleden vragen teamgenoten wat zij kunnen, wanneer zij bepaalde vaardigheden willen leren	1	2	3	4	5	6	7
Wanneer iemand in het team iets goed kan, vragen teamleden of die collega het hen ook wil leren	1	2	3	4	5	6	7
Teamleden vertellen anderen van het team regelmatig waar zij mee bezig zijn	1	2	3	4	5	6	7
Als teamleden iets nieuws hebben geleerd, zorgen zij dat andere teamleden dit ook te weten komen	1	2	3	4	5	6	7
Informatie die teamleden hebben, delen zij met anderen in het team	1	2	3	4	5	6	7
Onze teamleden vinden het belangrijk dat hun collega's in het team weten waar zij mee bezig zijn	1	2	3	4	5	6	7
De team samenstelling wisselt continu	1	2	3	4	5	6	7
Dit team is stabiel, met weinig veranderingen in samenstelling	1	2	3	4	5	6	7
Team leden hebben eigen taken met weinig noodzaak voor hen om samen te werken	1	2	3	4	5	6	7
Om met het team tot resultaat te komen is veel communicatie en coördinatie noodzakelijk	1	2	3	4	5	6	7
Team leden zijn sterk afhankelijk van elkaar om het werk van het team gedaan te krijgen	1	2	3	4	5	6	7

In het vak hieronder kunt u gedachtes over de enquête, feedback of andere dingen neerzetten.



7.2 Survey team leaders

Wat is uw leeftijd? Kies hieronder de leeftijdscategorie waar u onder valt door het juiste vak aan te kruisen.

18 - 25	26 - 35	36 - 45	46 - 55	56 - 65	> 65
---------	---------	---------	---------	---------	------

Wat is uw geslacht? _____

Hoe lang bent u al in dienst bij _____? Kruis het vak aan wat op u van toepassing is.

0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	> 26
-------	--------	---------	---------	---------	------

Hoe lang werkt u al in uw huidige functie bij _____? Kruis het vak aan wat op u van toepassing is.

0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	> 26
-------	--------	---------	---------	---------	------

Van welk team bent u de leider (nummer)? _____

Het eerste gedeelte van deze enquête zal gaan over de prestaties van uw eigen team. Het is de bedoeling dat u voor uw eigen team aangeeft in welke mate de uitspraken van toepassing zijn volgens u.

	1	2	3	4	5	6	7
	Nooit	Sporadisch	Af en toe	Regelmatig	Dikwijls	Heel vaak	Altijd

Dit team voldoet aan of overstijgt de verwachtingen	1	2	3	4	5	6	7
Dit team doet geweldig werk	1	2	3	4	5	6	7
Dit team maakt regelmatig kritische kwaliteitsfouten	1	2	3	4	5	6	7
Dit team doet het steeds beter en beter	1	2	3	4	5	6	7

Het tweede gedeelte van de enquête zal gaan over de andere teamleiders. Er zullen een aantal uitspraken volgen. Het is de bedoeling dat u per leidinggevende aangeeft in welke mate de uitspraken volgens u van toepassing zijn. Ik vraag u om steeds boven de uitspraken te vermelden over welke leidinggevende het gaat (nummer). Let op: u kunt slechts één antwoord kiezen per vraag.

Leider team nummer _

	1	2	3	4	5	6	7
	Nooit	Sporadisch	Af en toe	Regelmatig	Dikwijls	Heel vaak	Altijd

De leidinggevende ...

... maakt mij trots dat ik mag samenwerken met hem/haar	1	2	3	4	5	6	7
... vindt het groepsbelang belangrijker dan het eigenbelang	1	2	3	4	5	6	7
... gedraagt zich op een respectvolle wijze naar mij en roept sterk vertrouwen op	1	2	3	4	5	6	7

7.3 Survey management

Wat is uw leeftijd? Kies hieronder de leeftijdscategorie waar u onder valt door het juiste vak aan te kruisen.

18 - 25	26 - 35	36 - 45	46 - 55	56 - 65	> 65
---------	---------	---------	---------	---------	------

Wat is uw geslacht?

Hoe lang bent u al in dienst bij [redacted]? Kruis het vak aan wat op u van toepassing is.

0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	> 26
-------	--------	---------	---------	---------	------

Hoe lang werkt u al in uw huidige functie bij [redacted]? Kruis het vak aan wat op u van toepassing is.

0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	> 26
-------	--------	---------	---------	---------	------

Hieronder volgen 4 uitspraken over de prestaties van de teams. U heeft 7 keuzes, hieronder weergegeven. Ik wil u verzoeken steeds aan te geven welk team u beoordeelt.

1	2	3	4	5	6	7
Nooit	Sporadisch	Af en toe	Regelmatig	Dikwijls	Heel vaak	Altijd

Dit team voldoet aan of overstijgt de verwachtingen	1	2	3	4	5	6	7
Dit team doet geweldig werk	1	2	3	4	5	6	7
Dit team maakt regelmatig kritische kwaliteitsfouten	1	2	3	4	5	6	7
Dit team doet het steeds beter en beter	1	2	3	4	5	6	7

Ten slotte wil ik u vragen wat de kritische prestatie indicatoren zijn die u als chef aanhoudt voor de teams. Zou u deze hieronder willen schrijven?

7.4 Interview questions

- Wie ben je?
- Hoe oud ben je?
- Hoe lang ben jij al werkzaam bij de politie?
- Welke functies heb jij vervuld in deze periode?
- Hoe lang ben jij al werkzaam als teamleider bij [REDACTED]?
- Hoe lang bent u al werkzaam als teamleider bij dit team?
- Wat zijn volgens jou de unieke karakteristieken van werken bij [REDACTED] ?
- Hoe ziet de team structuur eruit/hoe worden taken uitgevoerd?
- Is er veel afhankelijkheid van elkaar in dit team wat betreft het uitvoeren van taken?
- Hoe vaak zijn er wisselingen in de team samenstellingen?
- Wat zijn de doelstellingen voor dit team?
- Hoe zorg jij ervoor dat de doelstelling nagestreefd worden?
- Wat doe jij wanneer een doelstelling niet behaald wordt?
- Hoe zou jij jouw manier van leidinggeven omschrijven?
- Hoe probeer jij jouw teamleden te motiveren?
- Hoe laat jij aan je teamleden merken dat jij vindt dat zij goed werk hebben verricht?
- Hoe reageer jij op problemen die ontstaan op de werkvloer?
- Hoe reageer jij op problemen die ontstaan naar aanleiding van 'cases' die opgelost moeten worden?
- Wat doe jij in het kader van informatie delen in het team?
- Wat wordt er zoal besproken in een team meeting?
- Wat wordt er zoal besproken buiten de meetings om, op de werkvloer?
- Hoe warm is het contact met de teamleden van uw team?
- Hoe is de samenwerking met de andere teamleiders?
- Hoe denkt u dat de andere teamleiders over u denken?
- Wat voor effect heeft dit op uw manier van leidinggeven?
- Hoe denk jij dat de teamprestaties van jouw team verbeterd kunnen worden?