# The effect of leadership behavior on work climate and team effectiveness.

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**ABSTRACT**
**This study looked at the effect of leadership behavior on the work climate and the effect of work climate on team effectiveness. A distinction was made between positive leadership behavior and contra productive leadership behavior as well as between a positive and negative work climate. A survey was held among followers to measure work climate and team effectiveness. Additionally the behavior of the 29 leaders were coded, using a video-observation method on data obtained during regular staff meetings. In contrast with the hypotheses, no significant relationships were found between both the leadership behavior and work climate and work climate and team effectiveness. Possible reasons for the discrepancy between the hypotheses and the results were given, together with suggestions for further research.**

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# 1. INTRODUCTION

A lot of work is done in teams. There is a lot of literature to find about how these teams work and what makes them effective. (Sundstrom et al., 1990; Van der Vegt and Bunderson, 2005) This study is specifically about the role of the leader in a team. A lot of studies are about what makes an effective leader. Most studies are about different leadership styles. (Burns, 1978; Kuhnert and Lewis, 1987; Avolio and Bass, 1995; Lowe et al., 1996; Hater and Bass, 1988; Judge and Piccolo, 2004; Podsakoff et al., 1982) One could say that the most important task for a leader of a team is to make his or her team more effective. Some scholars have argued that the work climate has an influence on team effectiveness. (Schaefer and Moos, 1996; Schaubroeck and Peng, 2011)

One could argue that a leader has an influential effect on the work climate of a team and that if a work climate has an effect on team effectiveness it would be possible for a leader to influence the team effectiveness, by influencing the work climate of a team.

So, the purpose of this paper is to add to the knowledge about effective leadership behaviors in relation to team climate. For this study staff meetings were observed and analyzed, so there is an opportunity to study the actual impact of leaders on the work climate and team effectiveness during actual staff meetings. One of the strengths of this study is that it looks at the leadership styles, work climate and team effectiveness, at the same time. There has not been much research about this particular subject, so this research may contribute to the knowledge about this relationship.

The goal of this paper is to study the impact that a leader has on the work climate of a team and how this work climate influences the team effectiveness. Therefore the following research question is proposed: *How does positive leadership behavior and contra productive leadership behavior influence the positive and negative work climate and team effectiveness?*

This paper is structured as follows: First a theoretical framework will be presented, where the results of earlier studies will be discussed. Second earlier studies about team effectiveness will be discussed, followed by earlier studies about the work climate and different leadership styles. In this section the hypotheses will be introduced as well. In the following section the methodology and design of this study will be discussed. Then the results of the study will be presented followed by a section about the conclusions that can be drawn from these results. Finally the limitations of this study and recommendations for further research will by presented and a final conclusion will be drawn.

# 2. THEORY AND HYPOTHESES

## 2.1 Team effectiveness

A lot of research has been done on teams and what makes them effective. Many scholars have proposed to see that effectiveness of a team can be reached by a process. (Mathieu et al., 2008; McGrath, 1984) There has also been research on the influence of the climate on team effectiveness. (McGrath, 1984) This paper will look at the effect of process as well as the climate on team effectiveness. It is important to study these two factors together, because it is difficult to understand the progress without knowing the context.

First the view of reaching team effectiveness by the means of a progress. Mathieu et al., (2008) proposes a team effectiveness framework based on the input-process-outcome (IPO) framework of McGrath (1964). This is a three stage model

which distinguishes between organizational, team, and individual input.

Drawing upon the IPO framework, McGrath (1984) states that the essence of a group lies in the group interaction process. McGrath (1984) distinguishes 4 classes of input-properties that make up this group interaction process.

1.  The properties of the group members: members of a group have certain traits, characteristics, belief, habits etc. that influence the group interaction process.

2.  The group structure: relationships between group members may take different forms and these patterns of relations influence the group interaction process.

3.  The task or situation: a group can be characterized by the task they are trying to accomplish. The task can be an assigned job or informally assumed goals. The type of task has an effect on the group interaction process.

4.  The surrounding-environment: The environment in which a group exists has an influence on the group interaction process, either by its physical or social aspects.

The Group interaction process and the results of this process can lead to changes in these input-properties. Therefore outputs represent changes in the four input-properties. (McGrath, 1984)

Besides the process we can also look at the climate to explain team effectiveness. McGrath (1984) proposes a conceptual framework to study groups, this framework consists of two elements: "individual people, who are the members of the group in question" and "the environment in which those people are embedded." The environment consists of two conditions, being the general physical environment and the social environment. The social environment is the main theme of this thesis. McGrath (1984) found that the social environment has a large influence on team effectiveness.

## 2.2 Work climate

Up till now there is not an extensive amount of research about work climate. When describing the work climate some scholars have distinguished between positive affect (PA) and negative affect (NA). (Watson and Tellegen, 1985; Carver and Scheier, 1990) Positive effect describes the extent to which a person experiences feelings of excitement and enthusiasm. Negative affect represents the extent to which a person feels upset or unpleasantly aroused. These two factors are independent and are therefore not opposites. Not all types of mood necessarily belong to one factor; a certain mood can be a marker of positive affect as well as a marker of negative affect. (Watson and Tellegen, 1985)

Carver and Scheier (1990) state that PA climate and Na climate can be affected by the progress a team makes. When it comes to progress teams or people have a certain standard. Carver and Scheier (1990) found that when progress happens at the same space as this standard this has no effect. When the progress happens at a lower rate than the standard this can be seen as a failure and there will be a negative affect. Contrary to this when the progress happens at a higher rate than the standard this can be seen as a success and there will be a positive affect. The effect of the progress people or a team make thus depends on two things the standard or normal pace at which they normally do things and the actual pace, this can affect the PA climate and the NA climate. Carver and Scheier (1990) also found that when a failure occurs this will not always lead to a negative affect, this depends on the perspective that is taken to look at the progress. When it is seen as a failure this will lead to more

NA climate, but it can also be seen as a learning opportunity which will lead to more PA climate. So the perspective taken on failures has an impact on the PA climate and NA climate and this is something on which the leader can have a big influence.

Schaefer and Moos (1996) stated that overtime work stressors and a negative work environment diminish staff's functioning and job morale. They found that good working relationships are crucial the wellbeing of a team.

In the literature on work climate there is also attention for trust in the organization. McAllister (1995) proposes a two-dimensional model distinguishing between two forms of trust: cognition-based trust "grounded in individual beliefs about peer reliability and dependability" and affect-based trust "grounded in reciprocated interpersonal care and concern." Other scholars found a relationship between trust and effective team performance as well. (Schaubroeck and Peng, 2011; Schaefer and Moos, 1996)

Therefore we can expect a relation between the work climate and team effectiveness. More specifically PA climate is excepted to have a positive effect on team effectiveness and NA climate is expected to have a negative effect on team effectiveness.

*Hypotheses 1A: PA climate has a positive effect on team effectiveness.*

*Hypotheses 1B: NA climate has a negative effect on team effectiveness.*

## 2.3 Leadership behavior

A lot of studies focus simultaneously on leadership behavior and team effectiveness. There are many definitions for leadership and although they differ they mostly have in common that in most definitions leadership is seen as a process of influence. They differ in aspects of who inserts influence and in what way. Some scholars believe that the leadership can be found in all or more members of the group and that this is a social influence process between all this members, while others believe that leadership is a specialized role exerted by often one group member who has more influence. There is also no agreement over the terms leadership and managers, although some scholars conclude that there is overlap between the two, others see them as being mutually exclusive. (Yukl, 1989) Although there are a lot of different definitions of leadership, it is useful to use one specific definition.

One of the most influential studies is on by Burns (1978), his study has influenced many other scholars and set the foundation of leaderships behavior studies.

Burns (1978) defines Leadership as: "Leaders inducing followers to act for certain goals that represent the values and the motivations – the wants and needs, the aspiration and expectations – of both leaders and followers."

Burns distinguishes between two leadership styles, which describe different relationships between the leader and the followers. This distinction is acknowledged by and used by many other scholars (Kuhnert and Lewis, 1987; Avolio and Bass, 1995; Lowe et al., 1996)

The first being transactional leadership, where there is a relationship between the leader and the follower which does not go further than bargaining for the purpose of exchanging valuable things. The second being transforming leadership, sometimes also referred to as transformational leadership, where the purposes of the leader and followers will become fused.

### 2.3.1 Transactional leadership

Transactional leadership occurs when one person contacts another person to exchange valuable things. This swap can have several natures: it can be an economic, psychological or political swap. Their purposes are related and can be changed during the process, but the relationship does not go further than this. When the swap is completed the two parties can go their separate ways, they are in no way bound together with a higher purpose. (Burns, 1978)

Bass (1985) developed the Multifactor Leadership Questionnaire (MLQ) which resulted in two factors that represented transactional leadership: (Hater and Bass, 1988)
1. Contingent Reward: The leader provides rewards if followers perform in accordance with contracts or expend the necessary effort.
2. Management-by-exception: The leader avoids giving directions if the old ways are working and allows followers to continue doing their jobs as always if performance goals are met.

A lot of research has been done using this MLQ. These studies consistently found a positive relationship between contingent reward and effectiveness. (Judge and Piccolo, 2004; Podsakoff et al., 1982). However studies found low correlations between Management-by-exception and effectiveness, but some studies also found a negative relationship (Lowe et al., 1996)

### 2.3.2 Transformational leadership

The second leadership style developed by Burns (1978) is transforming leadership, sometimes also referred to as transformational leadership.
Transformational leadership is present when the leader and the followers are bound together with a higher purpose, when they raise each other's motivation and morality. Although their purposes might be separated at the beginning, when transformational leadership occurs their purposes become fused. Although their purposes are bound and they may be inseparable in function, the leader takes the initiative and allows for the communication and the exchange to take place. (Burns, 1978) "In practice, the leader displays more frequent individualized consideration by showing general support for the efforts of followers, and by encouraging their autonomy and empowering them to take on more responsibility in line with their growing expertise and interest." (Avolio and Bass, 1995)

The MLQ (Bass, 1985) found three factors that were consisted with transformational leadership: (Hater and Bass, 1988)
1. Charisma, sometimes also referred to as idealized influence (Avolio and Bass, 1995): The leader instills pride, faith, and respect, has a gift for seeing what is really important, and transmits a sense of mission.
2. Individualized Consideration: The leader delegates projects to stimulate learning experiences, provides coaching and teaching, and treats each follower as an individual.
3. Intellectual Stimulation: The leader arouses followers to think in new ways and emphasizes
These factors are highly correlated (Avolio and Bass, 1995)
Further research has found statistically significant relationships between the factors charisma, individualized Consideration, intellectual Stimulation and effectiveness. (Lowe et al., 1996)
So the literature provides enough evidence to treat these dimensions as one style. Avolio and Bass, (1995) also distinguish a fourth factor of transactional leadership: inspirational leadership.

Hu and Kaplan (2015) proposes a positively associated linkage between:

- Idealized influence or charisma and followers' experience of pride
- Inspirational motivation and followers' experience of pride
- Intellectual stimulation and followers' experience of interest
- Individualized consideration and followers' experience of gratitude

So Hu and Kaplan (2015) propose that there is a positive relationship between transformational leadership and positive emotions in the workplace.

(Hater and Bass, 1988) found that transformational leadership is more compatible with a better educated work force. A more educated work force would be eager to learn and apply their abilities, they will therefore do well under a leader that will give a sense of mission, stimulated learning experiences, and aroused new ways of thinking. So the effect of the different leadership styles depends on the context.

Based on earlier research as described above it is reasonable to assume that there will be a positive relation between positive leadership behavior and work climate and a negative relation between positive leadership behavior and negative work climate. This paper will employ the concept of transformational leadership as positive leadership behavior.

*Hypotheses 2A: Positive leadership behavior has a positive influence on the PA climate.*

*Hypotheses 2B: Positive leadership behavior has a negative influence on the NA climate*

### 2.3.3 Contra productive leadership behaviour
Einarsen et al. (2007) define destructive leadership as: "The systematic and repeated behaviour by a leader, supervisor or manager that violates the legitimate interest of the organisation by undermining and/or sabotaging the organisation's goals, tasks, resources, and effectiveness and/or the motivation, well-being or job satisfaction of subordinates." The destructive behavior is directed towards two domains: the organization and its subordinates. The definition also includes that the behavior must be systematic and repeatedly, so when a leader shows this

behavior only once or a couple of times this would not be seen as destructive behavior.
Einarsen et al. (2007) distinguish 4 types of leadership behavior; the distinction between these 4 types has been made based on the two domains: organization and subordinates.
1. Tyrannical leadership: Where a leader shows anti-subordinate behavior, but pro-organizational behavior
2. Derailed leadership: Where a leader shows anti-subordinate behavior and anti-organizational behavior
3. Supportive–disloyal leaders: Where a leader shows pro-subordinate behavior, but anti-organizational behavior
4. Constructive leadership: : Where a leader shows pro-subordinate behavior and pro-organizational behavior

Constructive leadership is not a form of contra productive leadership behavior, whereas the leader in that case behaves constructively towards both the subordinates and the organization. Supportive–disloyal leaders also do not fall under the scope of this paper, because this paper is about the behavior towards the followers not towards the organization.

This Leaves Tyrannical leadership and derailed leadership, where leaders both show anti-subordinate behavior.

Ashforth (1994). Found a positive relation between tyranny and frustration/stress/reactance and helpnessles/ work alienation. A negative relationship was found between tyranny and leadership endorsement, work-unit cohesiveness

So contrary to positive leadership behavior, contra productive leadership behavior is expected to have a negative effect on the work climate.

*Hypotheses 3A: Contra productive leadership has a negative influence on the PA climate.*

*Hypotheses 3B: Contra productive leadership has a positive influence on the NA climate.*

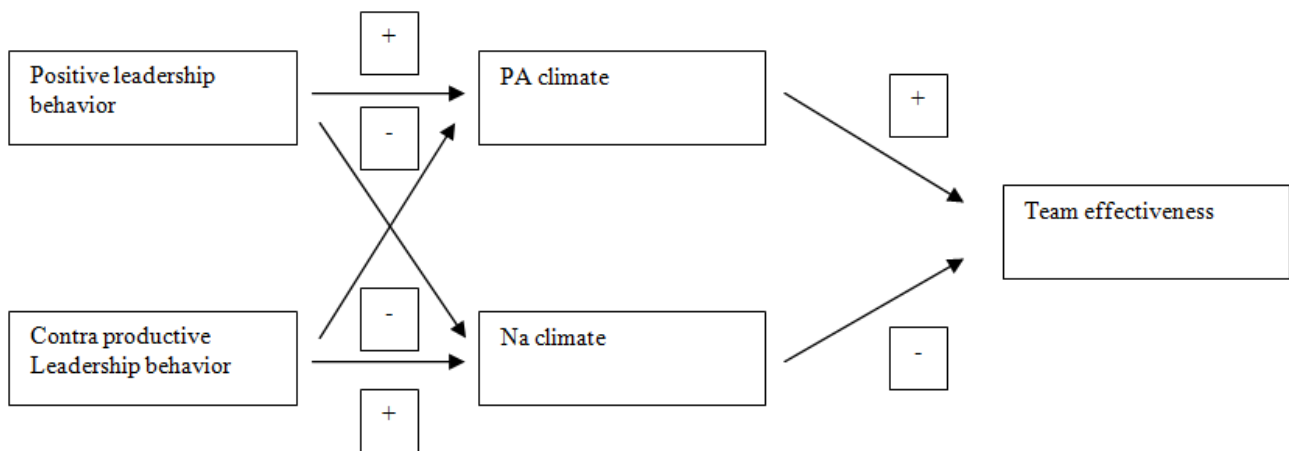Figure 1 shows a visualization of the key variables used in this study.



**Figure 1. Visualization of the key variables used in this study.**

## 3. METHODS

### 3.1 Design of the study

In this cross sectional study design two different data sources are used: (1) A survey measuring team effectiveness, and (2) reliable video-coded monitoring followers' and leader behavior during staff meetings. The overall team effectiveness was measured by the survey scores of the followers. Systematic video-coding made specific behavior of the leader analyzable.

### 3.2 Sampling

The leader sample consisted of 29 leaders employed in a large Dutch public service organization. Those leaders were either from M1 level of management or M2 level of management within this organization. The sample consisted of 20 male (69,0%) and 9 female (31,0%) leaders, which were on average 50,9 years old, ranging from 42 to 61(SD=5,19) The leaders have an average job tenure of 21,8 years (SD=12,6) ranging from 0,5 to 43 years.

The follower sample consisted of 405 followers employed at the same large Dutch public service organization. The sample consisted of 261 male (71,5%) and 104 female (28,5%) followers, the followers were on average 49,4 years old, ranging from 21 to 64 (SD=9,9) The average job tenure of the follower sample is 24,8 ranging from 0 to 46. (SD=13,48)

Directly after the video recorded staff meeting, the followers were asked to fill in a survey in which they were asked about the positive and negative affect, and the team effectiveness. In total 365 followers filled in the survey which resulted in a response rate of 90, 1%

### 3.3 Measures

#### 3.3.1 Team effectiveness

Team effectiveness was measured by the scores given by the followers in the questionnaire. To capture the overall sense of team effectiveness a four-item scaled developed by Gibson et al. (2009) was used. The four items are: "The team is effective", "The team makes few mistakes", "The team continuously delivers excellent results" and "The team cares for work with a high quality". The followers had to answer the questions within a 7-point-likert-scale. Ranging from 1(totally disagree) to 7 (totally agree).

#### 3.3.2 Work climate

The overall sense of the work climate was also captured by the followers' survey scores. The followers had to answer the question: How often have you experienced the following feelings in the past week within a 5-point-likers-scale ranging from 1 (almost not) to 5 (very often). Followed by feelings derived from the PANAS scale by Watson et al. (1988). 10 Items were used to capture the overall sense of PA climate and 10 items were used to capture the overall sense of NA climate.

#### 3.3.3 Leadership behavior

To analyze leadership behavior the 29 leaders were video-taped during a general staff-meeting. 3 camera's were placed at fixed positions in the room were the meeting took place. By using a detailed behavioral-coding scheme the behavior of the leader was scored in different categories. The different categories are linked to the different forms of leadership behavior analyzed in this study: positive leadership behavior and contra productive leadership behavior. The video's were coded by two independent observer's using the "The Observer XT": a software program for analyzing observational data. (Noldus et al., 2000). An observation schema and associated codebook were used to code the different types of leader behavior. (Gupta et al., 2009) Positive leadership behavior consisted of the behaviors: providing positive feedback, giving positive attention and personal informing. Contra productive leadership behavior consisted of: providing negative feedback and directing: correcting. The frequencies of these behaviors together formed the variables positive leadership behavior and contra productive leadership behavior.

After the meeting the followers were asked if they perceived the behavior of the leader as representative for other meetings. The followers had to answer this question within a 7-point-likert scale ranging from 1 (totally different) to 7. (not different at all) The average score was 5,55 (SD=1,30), this relatively high score suggests that the behavior of the leader during the staff meeting can be seen as representative.

### 3.4 Video-observation method

29 Leaders and 405 followers were videotaped during randomly selected staff meetings. The 29 staff meetings were coded and analyzed using "The Observer XT": a software program for collecting, managing, analyzing, and presenting observational data. (Noldus et al., 2000). The observers were trained to use the software and to apply the coding scheme. All video's were at least observed and coded by two independent students to avoid subjectivity bias. Later the results were compared and by significant differences discussed and recoded.

The videos were recorded by three different video cameras that were placed at fixed positions in the room where the staff meeting took place. Because there were no people from outside the team taking notes in the same room, observer bias was prevented.

### 3.5 Behavioral coding scheme

To code and analyze the data a behavioral coding scheme was used in order to capture the specific behavior by the leader. The work of Bales (1950), Borgatta (1964) and Feyerherm, 1994) was used as a solid base of the development of this behavioral coding scheme. The behavioral taxonomy developed by Yukl et al. (2002) was used as well.

### 3.6 Reliability test

To assess whether the surveys filled in by the followers were reliable the measurement Cronbach alpha was used. The 4 questions used to measure team effectiveness had a Cronbach alpha of 0,870, which means that these questions can be used as a reliable measurement for the overall team effectiveness. The 10 items of PA climate had a Cronbach alpha of 0,902 and the 10 items of NA climate had a Cronbach alpha of 0,924, so these items can also be seen as a reliably measurement of positive and negative affect respectively.

So the data was found to be reliable enough to continue testing. Furthermore PA climate, NA climate and positive leadership behavior are normally distributed. Contra productive leadership behavior was not normally distributed and the data was transformed with a lognormal distribution, which resulted in a normal distribution of contra productive leadership behavior. Because all the variable were normally distributed after this transformation a Pearson Correlation could be used to analyze the data.

## 4. RESULTS

the results of the Pearson Correlations analysis can be found in table 1. The results of the regression analysis can be found in table 2 and table 3.

**Correlation of team effectiveness, leadership behavior and work climate**

| Variables | Mean | s.d. | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|
| 1 Team effectiveness [1] | 4,95 | 0,53 | | | | | |
| 2 Positive leadership behaviour [2] | 8,96 | 5,69 | 0,11 | | | | |
| 3 Contra productive leadership behaviour [2] | 0,42 | 0,43 | -0,01 | -0,04 | | | |
| 4 PA climate [1] | 4,67 | 0,44 | -0,03 | 0,23 | 0,18 | | |
| 5 NA climate [1] | 2,31 | 0,37 | -0,05 | -0,12 | 0,31 | 0,11 | |

\* P<0,05, two tailed

[1] Variables were measured on a 7-point scale

[2] Variables were measured as a percentage of the total behaviour of the leader in the staff meeting

*Table. 1 Correlation of team effectiveness, leadership behavior and work climate*

**Regression analysis of leadership behavior and work climate**

| | PA climate | | NA climate | | Collinearity Statistics | |
|---|---|---|---|---|---|---|
| | Beta | Sig. | Beta | Sig. | Tolerance | VIF |
| positive leadership behavior | 0,24 | 0,22 | -0,11 | 0,58 | 1,00 | 1,00 |
| contra productive leadership behavior | 0,19 | 0,32 | 0,31 | 0,11 | 1,00 | 1,00 |
| $R^2$ | 0,09 | | 0,04 | | | |

*Table 2. Regression analysis of leadership behavior and work climate*

**Regression analysis of work climate and team effectiveness**

| | Team effectiveness | | Collinearity Statistics | |
|---|---|---|---|---|
| | Beta | Sig. | Tolerance | VIF |
| PA climate | -0,03 | 0,90 | 0,99 | 1,01 |
| NA climate | -0,05 | 0,80 | 0,99 | 1,01 |
| $R^2$ | 0,00 | | | |

*Table 3. Regression analysis of work climate and team effectiveness*

## 4.1 Leadership Behavior and work climate

Table 2 shows the regression analysis between positive leadership behavior, and positive and negative affect. The regression analysis between contra productive leadership, and PA climate and NA climate is also shown in table 1. The analysis shows that there is no significant relationship between positive leadership behavior and PA climate ($\beta$=.236, n.s.), so hypothesis 2A *(Positive leadership behavior has a positive influence on the PA climate.)* needs to be rejected. There was also no significant relationship found between positive leadership behavior and NA climate. ($\beta$=-.105, n.s.) So hypothesis 2B *(Positive leadership behavior has a negative influence on the NA climate.)* needs to be rejected as well. Contra productive leadership behavior was also analyzed. No significant relationship was found between contra productive leadership behavior and positive affect ($\beta$=.188, n.s.), so hypothesis 3A *(Contra productive leadership has a negative influence on the PA climate)* needs to be rejected. There was also no significant relationship found between contra productive leadership behavior and the NA climate, but it is an almost significant relationship on a one-tailed level. ($\beta$=-.309, p=0,11). This would mean that when the relationship was significant contra productive leadership behavior had a positive effect on the NA climate.

Overall this study found no relationship between the two different leadership styles: positive leadership behavior and contra productive leadership behavior, and the work climate.

## 4.2 Work climate and team effectiveness

Table 3 shows the results of the regression analysis between positive and negative affect, and team effectiveness. This study found no evidence of a relationship between the PA climate and the NA climate on team effectiveness.

No significant relationship was found between PA climate and team effectiveness ($\beta$=.025, n.s.) so hypothesis 1A *(PA climate has a positive effect on team effectiveness.)* needs to be rejected.

There was also no significant relationship found between NA climate and team effectiveness ($\beta$=-.051, n.s.), so hypotheses 1B *(NA climate has a negative effect on team effectiveness.)* needs to be rejected as well.

Overall this study found no relationship between work climate and team effectiveness.

# 5. DISCUSION

## 5.1 Leadership behavior

Although expected this study found no relationship between work climate and team effectiveness. But we did find a relationship between leadership behavior and work climate.

Hypothesis 2A and 2B proposed that there would be a relationship between positive leadership behavior and the work climate, more specifically a positive effect on PA climate and a negative effect on NA climate. This study found no evidence for hypotheses 2A and 2B. Hu and Kaplan (2015) proposed that there would be a positive relationship between positive leadership behavior and positive emotions in the work place, this study does not support this proposition. This difference may be explained by the measurements used; this study used different measurements to measure positive affect, namely the PANAS scale by Watson et al. (1988). This PANAS scale uses different measurements than the items Hu and Kaplan (2015) propose to measure the positive work climate.

Hater and Bass (1988) propose that the effect that transactional leadership has on team effectiveness depends on the context, more specifically they claim that a more educated workforce is more compatible with transactional leadership. The sample of this study only consists of leaders from the M1 or M2 level of management, so it may be arguable to conclude that the sample consists of an educated workforce. This would not explain why no significant relationship was found between positive leadership behavior and the work climate. But the followers were not questioned about their education level, so it may be that the education of the workforce is not high and this could according to Hater and Bass (1988) explain why no relationship was found between positive leadership behavior and work climate.

There is also a third possibility which may explain why the expected relationship between positive leadership behavior and work climate was not found. This study used data from a large Dutch public service organization, and it may be arguable that because this is an organization in the public service industry the effects found are not representative for other industries. There is a lot of literature describing so called public service motivation. (PMS) Houston (2000) found that employees that work in the public-sector have a different motivation than employees working in the private sector, so it could be argued that because this study was conducted in public service organization other factors such as PMS may explain that no effect was found between positive leadership behavior and work climate and that this result is not representative for other industries.

This study found an almost significant relationship between contra productive leadership behavior and the work climate. Einarsen et al. (2007) propose that for leadership behavior to be seen as destructive leadership behavior the behavior must be systematic and repeatedly. This study only looked at the behavior of the leader during one staff meeting. To establish whether this behavior happens at a regular basis or if it was unusual behavior of the leader during the staff meeting, we asked the followers if the behavior of the leader was representative for other staff meetings. As discussed in the section methods, the overall score given by the followers suggested that the behavior of the leader can be seen as representative.

The study did not take into account the behavior of the leaders outside of the staff meeting, it could be that the leader behaves differently outside the staff meetings and that this behavior has an effect on the work climate, which can explain why no significant relationship was found in this study between contra productive leadership behavior and work climate.

The PANAS scale (Watson et al., 1988) measures the work climate from a follower perspective. This study looked at the influence the leader had on work climate, but it may also be that the followers have a bigger influence on this work climate and this may disrupt the effect that a leader may have on the work climate. So it may be the case that the followers show different behavior than the leader and that this has a counter effect on the work climate, therefore explaining why no relationship between the both styles of leadership behaviors and work climate was found.

In this study we measured contra productive leadership behavior by the frequency leaders used the following behaviors: providing negative feedback and directing: correcting. This measures a mild form of contra productive behavior, therefore it cannot be seen as the same despotic behavior as described in the literature on which the hypotheses was build. This may explain why an almost significant relationship was found between contra productive leadership behavior and the work climate and not a significant relationship.

## 5.2 Work climate

Although a relationship was expected this study found no significant relationship between the work climate and team effectiveness, more specifically between PA climate and NA climate and team effectiveness. As stated earlier there is not much earlier research about the work climate, so it might just be that there is no significant relationship between the work climate and team effectiveness. It might also be that one of the earlier stated possible explanations for the absence of the expected relationship between leadership behavior and work climate also affects the relationship between work climate and team effectiveness. The education of the work force may play a role in the absence of a significant relationship between work climate and team effectiveness. As well as the fact that our sample consisted of teams working in the same large Dutch public service organization and that it is therefore not possible to generalize the results and that the results cannot be compared to other studies.

# 6. STRENGTHS, LIMITATIONS, AND DIRECTIONS FOR FURTHER RESEARCH

An important strength of this study is that a video-observation method was used to observe the behavior of the leaders and followers. Another strength is that this study used different methods to study followers and leaders; next to the video-observation method, a survey filled in by the followers and leaders was used as well.

This study also has some limitations. First of all it contains a relative small sample of only 29 leaders. Secondly the leaders and followers were all employed by the same a large Dutch public service organization, as earlier mentioned. Because this organization is in the public service industry it is not possible to generalize the result among other industries.

Furthermore, Hofstede (1994) studied different cultures and found differences between countries that sets limits to the validity of management theories across borders. Kirkman et al. (2009) found that power distance moderates the followers reactions on transformational leadership. Because this study is done in a public service organization solely based in the

Netherlands it can be argued that it is not possible to generalize the results of this study in other countries.

As discussed in the earlier sections this study was conducted at one point of time, from every team only one staff meeting was examined, this may have consequences on the results found. An opportunity for further research would be to conduct a longitudinal study to see whether the result will be the same as the results found in this study. This study found no significant relationship between leadership behavior and the work climate, if there is in fact a relationship between these two, which we did not found in this study under these particular circumstances it would not be possible to establish which factor influences the other factor. This study assumed that leadership behavior has an effect on the work climate, but it could in fact be that work climate effects leadership behaviors. A longitudinal study can be helpful to establish the order of these variables.

As suggested earlier the fact that only the behavior of the leader in the staff meeting was taken into account may explain why the expected relationship between leadership behavior and work climate was not found. So another idea for further research is to also analyze the behavior of the followers and see how their behavior may influence the work climate and may disrupt the effect of leader behavior on work climate

## 7. CONCLUSION

The aim of this research was to see if leadership behavior has an effect on the work environment and via this work environment an effect on team effectiveness. We tried to answer the following research questions: *How does positive leadership behavior and contra productive leadership behavior influence the positive and negative work climate and team effectiveness?* No significant relationship was found between positive leadership behavior and the work climate and an almost significant relationship was found between contra productive leadership behavior and the work climate. Between positive and negative affect and team effectiveness no relationship was found as well. So this research suggest that the answer to the research question is that that positive leadership behavior does not influence the positive and negative work climate nor team effectiveness, but contra productive leadership behavior has an effect the negative work climate. The earlier sections also discussed some other variables that might explain why in this thesis no significant relationship was found between these variables, while there is in fact an effect. Earlier sections also discussed why it may not be possible to generalize the results of this study to other organizations.  So, further research is necessary to determine if there is in fact no relationship between leadership behaviors and work climate and the team effectiveness, or if this may depend on other variables.

## 8. ACKNOWLEDGMENTS

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