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Self-awareness in military officers with a high degree of developmental leadership

Ole Boe^{a*}, Torill Holth^a^a*Department of Military Leadership and Tactics, Norwegian Military Academy, P.O. Box 42 Linderud, 0517 Oslo, Norway*

Abstract

Problem Statement: Being self-aware about your preferred leadership behavior is important for a military officer. Equally important is getting feedback that indicates how others perceive your leadership behavior. **Purpose of Study:** To investigate the degree of self-awareness regarding military cadets' leadership behaviour and how this was correlated with others perceptions of the same leadership behavior. **Method:** This study was an explorative and descriptive study. 26 cadets at the Norwegian Military Academy filled out the Developmental Leadership Questionnaire (DLQ) measuring their degree of developmental leadership, as well as their degree of transactional leadership and non-leadership. The cadets also had to send the same DLQ to 6-10 commanders, colleagues and subordinates in order to get feedback from them on their leadership behavior. **Findings and Results:** It was found that the cadets scored themselves lower on both developmental leadership and on the positive parts of transactional leadership and higher on both the negative parts of transactional leadership and on non-leadership as compared to their respondents. **Conclusions and Recommendations:** In the scores the cadets gave themselves they scored quite high on developmental leadership and on the positive sides of transactional leadership, and quite low on the negative sides of transactional leadership and on non-leadership; one may conclude that they have a high degree of self-awareness. This also indicates that they are developmental leaders although they may not see this as clearly as their respondents do.

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1. Introduction

Future wars will probably include a large element of uncertainty and friction for military officers. This will in

* Ole Boe. Tel.: +47-23099448.

E-mail address: olboe@mil.no.

turn place great demands on an individual who will have to lead other people in these situations (Watts, 2004). This strengthens the need for military leaders to constantly think about their roles, norms, and values (Snider & Matthews, 2005). It has been established that contemporary military operations put great demands on the individual officer after he or she finishes his or her education at the Norwegian Military Academy (NMA) (Heen, 2006; Heen & Wathne, 2006). Norwegian soldiers and officers have participated in several international military operations abroad and this has put an increasing strain of demands upon their leadership (Boe, Kjørstad, & Werner-Hagen, 2012). The Norwegian Armed Forces is governed by the Norwegian Armed Forces Joint Operational Doctrine (NAFJOD) (Forsvarets Stabsskole, 2007). This doctrine states that the stress of war can be extreme. In the military profession, the will to succeed and to strive forwards yields results that exceed expectations, that is, the difference between success and failure. The doctrine emphasizes the importance of an officer being able to reflect on his or her own efforts and influence other people to perform at their absolute best in difficult situations. However, this is something that has to be learned, and the NMA employs a concept of leadership development designed to facilitate this learning process (Boe et al., 2014; Boe, 2013; Jensen, 2012). The concept is based upon the desirable leadership skills and abilities that are set out in the NAFJOD (Forsvarets Stabsskole, 2007). As a part of this concept, cadets at the NMA take part in a one-week course in Developmental Leadership (DL) (Larsson et al., 2003). During this course, the cadets receive feedback on many of the properties that define a competent officer, for example if they are perceived as exemplary role models, whether they show individualized consideration, and if they are able to inspire and motivate the personnel they lead. The underlying premise for the course is that it is possible to develop one's leadership skills by becoming aware of one's leadership behavior. In line with this thinking, Biswas-Diener, Kashdan, and Minhas, (2011) postulate that character strengths can be developed through an increased awareness and effort, and are phenomena that co-exist with goals, interests, and values. Our thinking is that if our participants' scores on different leadership behavior resemble the scores they receive from their respondents, our participants may be said to have a high degree of self-awareness. This means that they are aware of what they do as leaders, and how this impacts others.

However, we do not know exactly what kind of leadership that will be required from the individual officer. It is therefore of interest to find out as much as possible regarding this so that one may predict who will succeed in leading others in an operational context. Likewise, we would also like to find out what kind of leadership that is most effective in the same context. Looking at personality factors, it has been found that openness was the best predictor of maximum performance among military personnel (Ployhart, Lim, & Chan, 2001). Sosik and Megerian (1999) investigated leader emotional intelligence and performance, and found that the correlations between the aspects of emotional intelligence, the leader's behavior, and the resulting performance varied as a function of the manager's level of self-awareness.

1.1. The purpose and aims of the present paper

The purpose of the study in this paper was to examine the degree to which cadets at the NMA were self-aware concerning their own leadership behavior. It is important to note that human behavior is in reality not the result of influence from a single primary factor, but should rather be seen as a combined influence of several primary factors together (Lord, 2000). Because of this, we used all the different aspect of DL in order to investigate self-awareness in the cadets. This paper aims to answer the question whether there is a correlation between how cadets at the NMA perceive themselves as leaders and how others perceive the cadets as leaders. If a high correlation is found, this indicates that the cadets are self-aware of their leadership behavior and their effect upon other people. A further aim was to find out if the cadets see themselves and are seen by other as developmental leaders. It was also of interest to investigate to what extent they think they used transactional leadership and non-leadership and to compare this to the perception of the cadets by others. A further goal was to see if cadets themselves thought they had a high degree of task-related competence, management-related competence, social competence and the capacity to cope with stress, and to what extent they contribute to their respective units in terms of results. A final aim was to compare the cadets' perception of their level of task-related competence, management-related competence, social competence and the capacity to cope with stress with the perception from their respondents, as this would indicate what level of self-awareness our cadets had.

2. Developmental leadership

Looking at leadership as a concept, it becomes clear that not all leadership is good leadership. Good leadership seems to be the type of leadership that safeguards both the development of employees and the performance requirements of the organization. Leading in difficult situations is also known as “in extremis” leadership (Kolditz, 2010) and leading in unforeseen situations (Torgersen, Steiro, & Sæverot, 2013). Transformational leadership is a type of leadership that has been found to affect the results achieved in a positive way in service and in production-oriented organizations (Bass & Riggio, 2006). Based on the theory of transformational leadership that was developed by Bass and Avolio (1990), the Swedish National Defence College has developed a model referred to as Developmental Leadership (DL) (Larsson et al., 2003). The DL assimilates all material from the leadership styles described in transformational leadership, but the term destructive leadership is excluded from the model. In addition, the DL does not describe charisma as a separate leadership ability, as charisma as a concept seems to have both a positive and a negative side. In the Swedish model, charisma is replaced by the tendency to inspire and motivate subordinates. The DL model thus describes three distinctive leadership styles; Non-leadership, transactional leadership and developmental leadership (Larsson & Kallenberg, 2006). The DL model is a hierarchical model that is made up of dimensions, factors and facets that together composed different leadership behavior.

The Norwegian Armed Forces consider themselves to be a value-driven organization. These common values will also act as a resilience factor and help personnel withstand different kinds of stress and guide them in complex situations (Forsvarsstaben, 2012). Previous research by Boe (2014) has established that there exist several strong links between the concepts used in the DL model and the concepts used in the NAFJOD. The concepts that were found to co-vary between the NAFJOD (Forsvarets Stabsskole, 2007) and the DL model (Larsson et al., 2003) were *responsibility, value-oriented and value-based, promote participation, caring and giving support and confrontation*. Furthermore authenticity in the NAFJOD was found to co-vary with the concept of value base in the DL model. In addition, the concept of being able to take actions in the NAFJOD co-varied with to take necessary measures in the DL model. Finally, the concept of cooperation in the NAFJOD co-varied with the concept of seeking agreements in the DL model (Boe, 2014). This led to the conclusion that the DL model is a valid starting point for investigating the NMA cadets’ leadership behavior and the degree of self-awareness in relation to the leadership styles described in the DL model.

2.1. The DL model’s hierarchical structure

The DL model is a hierarchical model and the model is composed of four levels. At the highest level one will find the dimension that describes the leadership style, below this is the factor level. The factor level describes each part of the dimension. The factor level in turn leads down to the facet level, and finally the facet level leads onto the actual behavior level. This is the level in which behavior can be directly observed and commented on or evaluated. A respondent receives feedback on actual behavior related to his or her leadership through filling out a questionnaire called Developmental Leadership Questionnaire (DLQ) and later receiving feedback in the form of a DL-profile describing different leadership behavior (Larsson et al., 2003).

The DL also incorporates some questions that are related to results of leadership, meaning to which degree one contributes to the performance, to the organizational image, and to work satisfaction in one’s unit. In addition, the DL incorporates contextual characteristics as well as some additional leader characteristics. The leader characteristics are divided into basic prerequisites consisting of physical, psychological, and view-of-life related aspects (Yukl, 2010). The leader characteristics further incorporate desirable competencies such as task-related competence, management-related competence, social competence, and the capacity to cope with stress. The DLQ focuses upon feedback on the desirable competencies as part of the leader characteristics, the 3 different leadership styles, and the result of leadership. Larsson (2006) investigated Swedish military cadets using the DLQ and the personality inventory NEO-PI-R (Costa & McCrae, 1992). Larsson found that high levels of developmental leadership had a strong correlation with positive results on performance issues. More specifically, these performance issues were behavior an individual exhibits so that his or her unit functions effectively. It was also revealed that that using high levels of developmental leadership could compensate for using high levels of demand and reward and over-control.

3. Method

This paper uses an exploratory and descriptive method. Descriptive statistics are used to classify and summarize numerical data, that is, to describe the data that have been collected (Hinkle, Wiersma, & Jurs, 1994). Since the participants differed in age, service experience and what military units they belonged to before entering the NMA, it was deemed unnecessary to make any hypotheses. Instead, the focus was upon describing the extent to which the participants as a group revealed self-awareness in relation to their leadership behavior, as compared to the perception others had of the same leadership behavior.

3.1. *Participants and respondents*

26 Army officers taking part in a six-month professional officer qualification program at the NMA took part in this in the study. The participants consisted of four women and 22 men. Due to the low number of women we will therefore not conduct any analyses related to gender. This will enable the 4 women in our study to continue to be anonymous. The 26 participants were first requested to send out an online survey in which they asked their respective respondents to judge them in relation to the four different levels of the developmental leadership model. The participants had to send this form to 4–10 higher leaders, colleagues at the same military rank level, and/or to subordinates. The participants received the answers from their respondents in the form of a DL-profile based upon the DLQ (Larsson et al., 2003) that the participants and their respondents filled out.

3.2. *The DLQ and its properties*

The DLQ consists of a total of 66 questions that are related to actual and observable behavior that can be assessed and evaluated (a previous version of the DLQ consisted of 77 questions). The DLQ measures three types of leadership styles: developmental leadership; transactional leadership and non-leadership, and is based upon a person's leadership behavior as perceived by themselves and by other people. The DLQ is thus designed to identify leadership behavior and 42 of the 66 questions concern leadership styles. The remaining 24 questions concern desirable competencies, including 4 questions that revolve around results. Results are here viewed as cost awareness and job satisfaction. In order to be judged as a developmental leader one has to obtain a score from others above 7.0 on developmental leadership. One also has to obtain a score of less than 3.0 on the negative parts of transactional leadership, control (facet over-control) and demand and reward (if but only if, reward). In addition, one has to obtain a score of less than 2.0 on non-leadership. Regarding the positive sides of transactional leadership, that is, demand and reward (facet seek agreements) and control (facet take necessary measures), the highest possible score is desirable. Furthermore, the desirable competencies and the results of one's leadership are also judged as positive, because this contributes to a developmental leader profile. Here again, a score as high as possible is desirable.

The results from the DLQ questionnaire are presented in the form of an individual profile for each cadet. The 26 participants were requested to fill out the same DLQ questionnaire assessing their own leadership behavior as they sent out to their respective respondents. Each profile then consists of a score of the assessment of one's own leadership behavior and a score from 4–10 other people who have answered the same questions. In the DL model the leadership style dimension DL consist of 3 factors, that is, exemplary model, individualized consideration, and inspiration and motivation.

3.3. *Reliability measures of the DLQ*

Internal consistency is an indicator that an element that is included in a scale actually measures the same concept as the other elements of the concept (Russell & Karol, 1994). Cronbach's alpha is a measure of scale internal consistency and is calculated from all possible "split-half"-correlations on a given scale. A test can be said to have a high degree of internal consistency if the Cronbach's alpha values are higher than 0.60. The Cronbach's alpha values have been found to vary between .60 and .85 for the DLQ, indicating that the DLQ has sufficiently reliability (Larsson et al., 2003).

3.4. Procedure

As a part of the NMA cadets' leadership development program they were requested to participate in an obligatory basic course in DL during April 2013. An important prerequisite to the course was to fill out the DLQ as well as sending it to 4–10 respondents that would judge the participant's leadership behavior. The administration of the DLQ to the respondents was done over the Internet by the participants. The participants were not aware of the answers given by their respondents. The Swedish National Defence College was responsible for data processing and had unique access to the answers on the DLQ. The answers given by the participants and their respondents were analyzed by the Swedish National Defence College. The authors printed out a separate DL profile and distributed this to each participant during the basic DL course. The participants had to interpret the results they got by themselves and then in small groups consisting of three participants. The intention was to expand each participant's understanding of the results they had achieved. A second intention was to discuss how they could continue to further develop their leadership. At the end of the course each participant developed a plan for his or her own leadership development based upon the results from the DLQ.

3.5. Processing the data

A copy of each individual DL-profile (containing answers from the participants and the respondents) was re-entered into the statistical program IBM SPSS Statistics 21. The re-entered data served as a basis for the descriptive analyses conducted in this paper. The answers to individual questions about behavior were combined into an average value for each facet (for instance, value base, good example, and responsibility). The facets were then combined into one factor (for instance, the corresponding factor exemplary model). Thus, one could find an average value for each of the factors exemplary model, inspiration and motivation, and individualized consideration. Furthermore, the leadership dimension transactional leadership was comprised of the factors demand and reward (facet seek agreements), control (facet take necessary measures), demand and reward (facet if, but only if, reward), and control (facet over-control). The first two factors reflect the positive side of transactional leadership, and the two last factors reflect the negative side of transactional leadership. The leadership dimension non-leadership was comprised of questions from the cadet's behavior converging into the factor laissez-faire leadership. According to the theoretical basis for the DL model one should have a score of more than 7.0 on the factors exemplary model, individualized consideration, and inspiration and motivation (Larsson et al., 2003). If the score is higher than 7.0, the frequency of one's leadership behavior is so high that one may be described as being a developmental leader. Furthermore, the scores should be lower than 3.0 on the negative aspects of transactional leadership, that is the factors demand and reward (facet if, but only if, reward) and control (facet over-control). It is further desirable that the score is as high as possible on the positive factors of transactional leadership, that is, the facets to seek agreement and to take necessary measures, and the correlating factors demand and reward and control. One should also score below 2.0 on non-leadership. On the dimension desirable competencies, the higher one scores on these factors: task-related competence, management-related competence, social competence, and capacity to cope with stress, the better it is. The factor results of leadership measures one's awareness of costs and contributions to work satisfaction in one's unit. Regarding the factor results of leadership, the higher the score, the better one is in contributing to the unit's overall performance. If the differences between one's own scores and other score are 1.0 or less one is said to have a high enough degree of self-awareness of one's leadership behavior and self-awareness of your effect upon other people (Larson, 2006).

4. Findings and Results

The participants own answers to the DLQ and the answers given from the respondents to the DLQ were used as the starting point for the descriptive analyses carried out in this paper.

4.1. Analysis of answers given to the DLQ

Table 1 provides an overview of the answers that participants have given themselves on the DLQ and the answer the participants have received from their respondents on the DLQ. The table first shows the three leadership dimensions, respectively DL, transactional leadership and non-leadership, with their corresponding factors. Then the factor desirable competencies is shown together with its associated four factors, respectively task-related competence, management-related competence, social competence, and capacity to cope with stress. Finally the factor result of leadership is shown. The answering scale ranged from 1 (never or almost never) to 9 (very often or always).

Table 1. An overview of participants' own and respondents' answers given to the DLQ. Mean values (M) and standard deviation (SD).

DLQ	Participants answers (n=26)		Respondents answers	
	M	SD	M	SD
Leadership styles				
Developmental leadership				
Exemplary model	6.70	0.63	7.39	0.60
Individualized consideration	6.26	1.12	7.11	0.64
Inspiration and motivation	6.04	1.05	6.92	0.69
Positive transactional leadership				
Seek agreements	6.60	1.13	7.03	0.47
Take necessary measures	6.99	0.85	7.18	0.56
Negative transactional leadership				
Over-control	3.18	1.21	2.39	0.87
If, and only if, reward	3.38	1.21	2.64	0.95
Non-leadership	2.34	1.36	1.90	0.67
Desirable competencies				
Task-related competence	6.80	1.09	7.40	0.72
Management-related competence	6.14	1.03	6.80	0.67
Social competence	6.50	1.28	7.50	0.73
Capacity to cope with stress	5.98	1.33	6.99	0.55
Result				
Result of leadership	6.30	0.91	7.19	0.55

Scale ranging from 1 (never or almost never) to 9 (very often or always)

As can be seen in Table 1 the mean values of the answers that the participants received from their respondents on the three factors of developmental leadership are generally a bit higher than the participants scored themselves. The same pattern is found when looking at the positive sides of transactional leadership and at the desirable competencies. Regarding the negative sides of transactional leadership and non-leadership, we find the opposite pattern. Here the participants scored themselves higher than their respondents did, indicating that the participants think they exercise more negative transactional leadership and non-leadership than their respondents do.

It turns out that the respondents scored the participants above the norm value 7.0 on the factors exemplary model (M=7.39), individualized consideration (M=7.11) and slightly below the norm value 7.0 on inspiration and motivation (M=6.92). There thus seems to be a small gap between the participants' own scores and the scores given by respondents, indicating that the participants are not fully self-aware of their leadership behavior. The respondents clearly think the participants are developmental leaders, but the participants do not see it the same way. When pooling the three factors exemplary model (M=7.39), individualized consideration (M=7.11) and inspiration and motivation (M=6.92), the new variable developmental leadership was overall higher than the norm value 7.0 (M=7.14). Thus there is evidence to suggest that the participants are perceived as developmental leaders by their

commanders, colleagues, and subordinates. Regarding the positive aspects of the transactional leadership the respondents scored the participants relatively high, respectively seek agreement ($M=7.03$) and to take necessary measures ($M=7.18$). This shows that the participants are perceived by the respondents to often use these aspects of transactional leadership. When it comes to the negative aspects of the transactional leadership, i.e. if, and only if, reward, and over-control the respondents scored the participants below the norm value of 3.0. Here the participants scored themselves higher, again indicating that they think they use these negative aspects of transactional leadership to a higher degree. These results indicate that our participants are developmental leaders who do not use the negative sides of transactional leadership much. The small differences between the participants' own answers and the respondents' answers indicate that our participants have a high degree of self-awareness. In other words, they know how they behave and they know how they affect others. But this is not unidimensional, as our respondents score themselves lower on DL, and higher on transactional leadership and non-leadership with its corresponding factors, when compared to their respondents' scores.

For if, and only if, reward the respondents scored the participants low ($M=2.64$) and the same pattern was seen with over-control ($M=2.39$). This means that the participants to a relatively small extent were perceived to use an apparent system of punishment and reward and that they were not seen by their respondents to engage in over-control.

Regarding the desirable competencies, the respondents again scored the participants higher on task-related competence, management-related competence, social competence, and capacity to cope with stress than the participants did themselves. This gives the impression that the participants in accordance with the DL were perceived to possess a high degree of desirable skills in these areas. Regarding the result of leadership, i.e. the extent to which one contributes to cost efficiency and satisfaction in the workplace, the respondents scored the participants high on the factor result ($M=7.19$). Again, the participants revealed a tendency to score themselves lower on this factor compared to their respondents. An analysis of the correlation between the dimension developmental leadership and result of leadership as measured by the factor result proved highly significant ($.82, p = .000$). One interpretation of this is that since the participants perceived themselves to be developmental leaders, they also perceived themselves to contribute positively to the cost effectiveness and to work satisfaction in their units. This corroborates Larsson (2006) who found that there was a high consistency between being a developmental leader and high scores on the result of one's leadership.

5. Conclusions and Recommendations

The purpose of this study was to investigate the degree of self-awareness regarding the leadership behavior of military cadets and how this was correlated with how others perceived the same leadership behavior. We used an exploratory and descriptive method in this paper. The answers our participants received from their respondents on the three factors of developmental leadership were generally a bit higher than the participants scored themselves on the three same factors. We found the same tendencies regarding the positive sides of transactional leadership and the desirable competencies. On the other hand, we found find the opposite tendencies when looking at the negative sides of transactional leadership and non-leadership. Our participants scored themselves higher on these factors than their respondents scored them. This may simply reflect the fact that the participants think they exercise more negative transactional leadership and non-leadership than their respondents think the participants do.

The general tendency to underscore themselves on the positive sides of leadership and to over-score themselves on the negative sides of leadership may indicate that our participants are not fully aware of their impact upon other people. Still, they must be said to have a high degree of self-awareness since the differences in scores between their own scores and the respondents' scores were quite small. The desirable competencies and their associated four factors, respectively task-related competence, management-related competence, social competence, and capacity to cope with stress, revealed the same tendencies, namely that our participants underscored themselves as compared to the scores given from their respondents. Again, the differences between the participants and the respondents' scores were so small that we still find our participants to have a high degree of self-awareness regarding their leadership behavior.

With only 26 participants taking part in our study, we feel obliged to point out some important challenges. It is possible that this may have resulted in low statistical power, thus affecting our results (Cochran, 1965). Stated

differently, we may have ended up in the trap of dragging incorrect conclusions that there were no significant differences in our analyses (so-called type 2 errors). This can occur in studies where you have a low number of participants. It is possible that with a larger sample different results may have been found in our study. Finally, our participants may be considered a relatively homogeneous group consisting of 26 military cadets, and thus we have reduced the differences between individuals. The downside of using such a homogeneous group may be that it becomes difficult to generalize our results to a larger group of individuals who may not be as homogeneous (Mitchell & Jolly, 1992). We therefore recommend that future studies are conducted with a larger sample of participants.

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