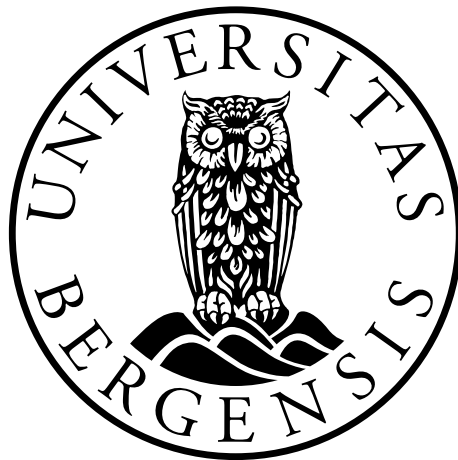# Are good leaders moral leaders?

*The relationship between effective military operational leadership*

*and morals*

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# List of papers

## Paper I

Olsen, O. K., Eid, J., & Johnsen, B. H. (2006). Moral Behavior and Transformational Leadership in Norwegian Naval Cadets. *Journal of Military Psychology*, 18, 37-56.

## Paper II

Olsen, O. K., Pallesen, S. & Eid, J. (accepted for publication). The Impact of Partial Sleep Deprivation on Moral Reasoning in Military Officers. *Sleep*.

## Paper III

Olsen, O. K., Eid J., & Larsson, G. (2010). Leadership and Ethical Justice Behavior in a High Moral Intensity Operational Context. *Journal of Military Psychology*, 22, 137-156.

# Abstract

This thesis presents selected works investigating the relation between leadership and morals. Given the multitude of moral challenges and the grave consequences of moral transgressions in military operations, we have chosen a military context to frame our research. Transformational leadership and the full range of leadership model (FRLM) are key constructs in this investigation, as this leadership concept has been shown to be related to operational effectiveness in military as well as other organizational contexts. However, the relationship between such leadership and morals has been questioned in leadership literature.

The first study investigated whether officers' self-importance of moral identity and their activation of moral justice schemas were related to effective leadership. The second study investigated whether sleep deprivation, which is a condition of high prevalence in military operations, affected leaders' activation of moral justice schemas, and, consequently, their ability to make sound moral judgments. Lastly, the third study investigated the relationship between effective leadership and moral justice behavior in a situation of high moral intensity and temptation.

The studies included samples from 72 to 168 officer cadets from the Norwegian Naval and Military Academies. The results from our first study showed that the ability to activate mature moral justice schemas (measured by the DIT-2 test) as well as self-importance of moral identity (measured by the SIMI-scale) is positively associated with transformational and transactional leadership (measured by the MLQ-5X), while a negative relation was found for passive-avoidant leadership. On the one hand, these results replicate previous findings that there is a positive relationship between activation of justice schemas

and effective leadership behavior, and, on the other hand, they extend previous findings by showing an augmentation effect of self-importance of moral identity on justice schema activation in explaining leadership behavior.

In our second study, using a counterbalanced design, our investigation tested officer cadets in rested and sleep-deprived condition in relation to their activation of moral justice schemas. The results showed that partial sleep deprivation caused strong impairment of leaders' ability to activate mature moral justice schemas, to the benefit of a strong increase in activation of rules orientation. This indicates that the ability to lead well and act morally may be dramatically impaired in operations when leaders lack sleep.

Finally, the last study investigated military leaders' actual moral behavior in a demanding prisoner of war (POW) exercise, and the relationship between leadership behavior and such moral behavior. Here, we defined moral justice behavior as the ability to withhold information from enemy interrogators. After the exercise, we compared moral behavior with evaluations of leadership behavior conducted by peers on the basis of eight months of shared leadership training. The results showed that transformational and transactional leadership is positively related to moral justice behavior in a situation involving high moral intensity, temptation and hardship.

In sum, the thesis provides support for the claim that transformational and transactional leadership in a military operational context is positively related to moral cognition and behavior. It further shows that, in the operational context, sleep-deprivation represents a major threat to mature moral justice reasoning and judgments.

# Contents

# 1. Introduction

During recent decades, NATO and UN military forces have been utilized to support and enforce peace and stability in a broad spectrum of operations worldwide. The complexity and tempo of such modern operations and the often negative and long-lasting consequences of operational failures (Krulak, 1999; Shay, 1995, 2002; Taguba, 2004) underscore the importance of effective operational leadership (FFOD, 2007; FM6-22, 2006). However, the tragic mistakes seen in many modern military operations also remind us that military operational leadership is an extremely difficult task (Bartone, 2005; Collyer & Malecki, 1998; Windslow, 2004). Therefore, leader selection and leader development are emphasized as one of the most important challenges in the military (FFOD, 2007; FM6-22, 2006). Here, moral character is usually at the heart of successful operational leadership. However, little empirical research has been conducted to investigate how and whether morals actually support effective operational leadership. Hence, the scope of the present thesis is to investigate the relationship between various forms of more or less effective leadership and morals in a military context.

In society in general, there has been an almost epidemic increase in writings on the topic of moral leadership during the last decade. For example, the 1990 version of the 1182-page Bass and Stogdill's "Handbook on leadership*"* (Bass, 1990), has only five index references to ethics, leading to the conclusion that: ".., [ethics] is a severely underresearched area of empirical research on managerial and leadership behaviour (p. 905)". By comparison, the 2008 version of the same book has dedicated 39 pages to the topic (Bass & Bass, 2008). The same tendency can be seen in a Google net search for "moral leadership", providing about 223 000 hits on the topic. Nevertheless, according to Rhode (2006, p. 5),

"..there is surprisingly little systematic analysis of a key issue: whether all leadership has a moral dimension".

In contemporary leadership literature, morality is usually emphasized as a prerequisite for effective leadership (Bass & Bass, 2008; Brown, Treviño, & Harrison, 2005) as well as social cooperation in general (Krebs & Denton, 2005). The same view is clearly emphasized in contemporary military doctrines (FFOD, 2007; FM6-22, 2006). Here, morality is seen as instrumental in the creation of combat motivation, cohesion and public support, as well as being a vital element in the achievement of lasting peace in the wake of war and armed conflict (Walzer, 1977). Nevertheless, some scholars question the assumption that good leadership encompasses morals. Conversely, they view morals as an obstruction to effective leadership. In consequence, moral aspects such as follower participation, care, justice, and respect, are portrayed as something that most leaders claim they do, and often would like to do, but still do not do because they need to get the job done (Bailey, 1988; Krantz, 2006). This may be particularly true in a military operational context where the stakes and risks are extremely high. Here, leadership may require extraordinary use of power, threats and manipulation in order to get people to put themselves in "harm's way" (Ledeen, 1999).

Historic examples like Hitler can serve to exemplify the complexity of this question. Hitler was in one sense successful in achieving complicated goals through social cooperation; he was perceived as a moral example by many of his followers, but was at the same time obviously highly immoral (Bass & Steidlmeier, 1999; Warner, 2008). In contrast, equally powerful leaders like Gandhi and Mandela combined highly morally-oriented leadership with impressive goal achievements through social cooperation.

In order to pursue the present investigation, I will first position our research approach within the larger context of leadership and moral leadership research. Secondly, to provide an overview of the investigation, I will describe the research model and the logical structure of the investigations. On this basis, given the multitude of definitions attached to morals and leadership, I will define both the leadership and the morals construct utilized in the study. Based on these definitions, I outline the research aims by providing arguments for and against the assumption that leadership thrives on morals. Given the limited body of research on moral leadership in a military context, the research model and research questions are mainly deducted from research on non-military organizations and adapted to a military operational context.

## 1.1 A brief overview of research on leadership and morals

According to Popper (1972), a research process presupposes that it is possible for others to falsify your results and models in a dialectic process of critical and rational discourse. Thus, in the following section, I will briefly present the research context within which our research questions and discourse were developed.

### 1.1.1 Leadership research

Leadership studies typically endeavor to understand how and why the leader-follower relationship works. According to Yukl (2010), leadership has been studied in different ways, depending on the researcher's methodological preferences and conception of leadership. Most research on leadership can be classified into five approaches: (1) the trait approach (2) behavior approach (3) power-influence approach, and (4) situational approach. Lately, there

has been a turn towards (5) integrative approaches that combine elements from all the earlier perspectives and have gained increased focus (Avolio, 2007; Avolio, Walumbwa, & Weber, 2009). Here, a shift can be traced from research that perceives leadership as an individual phenomenon towards a focus on leadership as a collaborative process, including followers, organizational climate and other relevant influences (Avolio, et al., 2009). Accordingly, Bennis (2007) emphasizes that future development of leadership theory will be interdisciplinary, including cognitive scientists, social psychologists, as well as ethicists, and others.

An important focus of integrative theories is how followers of certain leaders are motivated to exert extraordinary effort for the good of the group and goal attainment (Grint, 2005). Investigations of such questions have typically been sought from psychology and business (Ciulla, 2004). Little attention has been paid to *whether*, and *how*, morals could explain such relationships. On this basis, Ciulla (1998, p. xvi) claims that: "Leadership scholars know quite a bit about the psychology of leadership, but very little about the moral relationship of leadership." This claim is supported by Bennis (2007), who sees the effort to find an academically justifiable way to deal with the value-laden nature of leadership as being one of the greatest challenges in leadership research. Here, Bennis finds investigations of the role of justice in the production of effective leadership to be a particularly fruitful avenue of research.

## 1.1.2  Research on morals and leadership

An ethical question already implicit in the Ohio and Michigan studies of leader behavior in the 1950's is: are leaders more effective when they are nice to people, or are leaders more effective when they use certain techniques to structure and order tasks? The empirical

evidence here is not conclusive (Ciulla, 2004). A gradually growing research effort focuses on identifying the function and importance of morals in leadership (Rhode, 2006), as well as its content and antecedents (Brown & Treviño, 2006).

One approach to addressing these complexities is to single out leadership behavior that is based on moral categories and that influences the leader-follower cooperation and outcomes. For example, research on "organizational justice" (Greenberg & Colquitt, 2005) shows that people's perception of something being fair and just stimulates commitment and trust, which, in turn, has been shown to have a significant impact on cooperation and outcomes. Other examples of this research approach include "behavioral integrity" (Becker, 1998) and destructive leadership behavior such as "abusive supervision" (Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007).

Others seek to develop more holistic leadership theories, such as "ethical leadership" or "servant leadership", as the basis for moral categories (Brown & Treviño, 2006; Greenleaf, 1991).  In the "ethical leadership" construct (Brown, et al., 2005), a good leader is portrayed as a moral person (e.g. fair, honest, behaving morally both in personal and professional life) and a moral manager (e.g. makes a proactive effort to influence followers' ethical behavior), which influences followers' moral conduct. An alternative focusing on sense-making  is represented by research on "spiritual leadership", in which leaders  create a sense of spiritual meaning in followers through values such as honesty and humility, motivated by leaders with a calling to serve God or humanity (Fry, 2003).

Lastly, a somewhat alternative research approach investigates the moral content of already established normative leadership theories that have been shown to produce positive organizational outcomes. For example, one line of research that concurs with the approach of the present thesis seeks to include potential moral components in transformational

leadership (TL), initially portrayed as value-neutral leadership (Bass, 1985). Here, a

controversial issue is whether transformational leaders are manipulative in their influence on

followers, or, conversely, morally-oriented (Khoo & Burch, 2008; Parry & Proctor-

Thomson, 2002). To meet this challenge, a theoretical distinction was drawn between

authentic and pseudo- transformational leaders (Bass & Steidlmeier, 1999). This sparked a

further focus on "authentic leadership" as a "root-construct" seen as a vital component of all

good leadership (Luthans & Avolio, 2003). However, according to Bass and Riggio (2006),

much remains to be learned about the moral factors that distinguish these two categories of

transformational leaders, as well as moral and authentic leadership in general (Bass & Bass,

2008; Brown & Treviño, 2006). This challenge is the general starting point for the present

thesis.


## 1.2 Research model


Our conceptual starting point holds that morals and leadership are multifaceted phenomena

that can be studied on an individual as well as a group and organizational level (Bass &

Bass, 2008). In the present thesis, leadership is studied at the individual level and defined

within the framework of the Full Range of Leadership Model (FRLM), positing TL as the

generally most powerful and effective leadership, augmented by transactional leadership

(TRK), and contrasted with passive avoidance leadership (PAV; Bass & Riggio, 2006).

In line with Brown and Treviño (2006), we suggest that moral behavior (and

leadership) has two main influences. On the one hand, moral behavior may be heavily

influenced by situational factors such as role modeling, diffusion of responsibility,

conformity, etc. (Zimbardo, 2007). On the other hand, individual differences such as

personality, values, intelligence and psychopathology may have an equally strong impact on such behavior (Brown & Treviño, 2006; Rest & Narvaez, 1994). Therefore, in the present research model – illustrated in figure 1 below – we include both sources of influence (i.e. antecedents of moral behavior). The situational antecedents encompass, on the one hand, (1) temptation and (2) sleep deprivation, which have been suggested to influence moral behavior in a negative way (Killgore, et al., 2007; Price, 2006), and, on the other hand, (3) high moral intensity, which is expected to stimulate moral behavior (Brown & Treviño, 2006). The individual factors include (1) activation of moral justice schemas, and (2) self-importance of moral identity. These variables are a representation of a person's level of moral reasoning and moral motivation, and are expected to stimulate moral behavior (Aquino & Reed, 2002; Rest, Narvaez, Bebeau, & Thoma, 1999).

Thus, our first study investigates whether these individual antecedents of moral behavior explain variance in leadership behavior. Our second study focuses on the interplay between situational and individual antecedents of moral behavior and how lack of sleep influences the activation of moral justice schemas, and, consequently, moral judgments and behavior. Furthermore, we recognize that there may be gaps between antecedents of moral behavior and actual moral behavior (Rest, et al., 1999; Simons, 1999). On this basis, our third and final study investigates whether leadership behavior is related to moral behavior, defined as the ability to implement justice requirements derived from a fair distribution of rights and duties in a demanding operational context (Greenberg & Colquitt, 2005). A negative finding here may indicate that effective transformational leaders emphasize morals more in words than in actual behavior.  It should also be noted that the present thesis does not include an investigation of outcomes of morals and leadership. However, we choose to include it in the model in order to visualize the importance of this research focus.
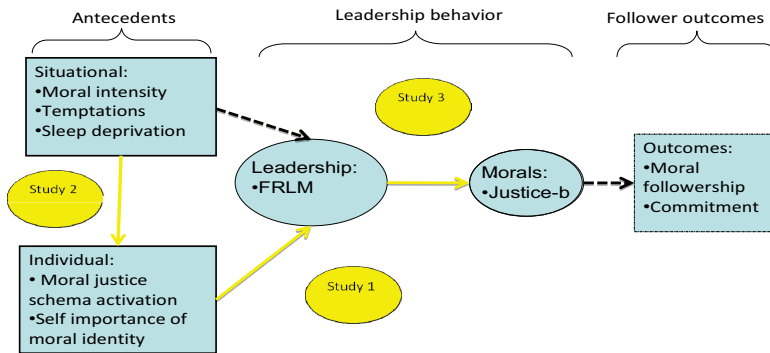
Figure 1. Elements in an investigation of moral leadership and the current approach

# 1.3 Leadership

According to Northouse (2001), four themes are generally found in definitions of leadership:
(1) Leadership is a process, which (2) involves influencing others, (3) within a group
context, (4) directed towards goal attainment. Following Hetland (2004), transformational
leadership could be defined in line with Richards & Engle (1986, p. 206) as ".. articulating
visions, embodying values, and creating the environment within which things can be
accomplished". Notably, several writers contend that leadership, which focuses on flexibility
and innovation, is qualitatively different and mutually exclusive from risk-averse and
stability-focused management (Yukl, 2010).  However, Waldman, Bass, and Yammarino
(1990) suggested that one could and should combine the two approaches, suggesting a
supplementary relationship in terms of an augmentation effect. The present investigation
follows this suggestion.

## 1.3.1  Transformational leadership (TL)

In the present thesis, effective leadership is defined as TL and the FRLM model, due to the latter's proven effectiveness in a great variety of contexts (Bass & Bass, 2008). As part of the FRLM model, TL could be classified as an integrative leadership theory, encompassing aspects of both leaders and followers, and the interaction between them (Yukl, 1998). In general, TL refers to the process of building commitment to the organization's goals and empowering followers in order to fulfill these goals (Bass & Bass, 2008; Burns, 1978). According to Yukl (2010) , TL theory is based on the assumption that emotional, value-based aspects of leadership can account for exceptional achievements by groups.

Several writers have suggested different versions of TL (Bass & Riggio, 2006; Burns, 1978; Tichy & Devanna, 1986). The present work is based on theories initially developed by Burns (1978) and Bass (1985). Burns (1978, p. 20) described TL as a process in which "leaders and followers raise one another to higher levels of morality and motivation". Here, TL is portrayed as influence that seeks to stimulate the consciousness of followers by appealing to higher ideals and moral values such as justice and equality, in contrast to emotions such as fear, greed and jealousy (Burns, 2004; Yukl, 2010). Consequently, Burns (1978) claimed – in terms of Maslow's need hierarchy – that TL activates higher-order needs in followers.

According to Yukl (2010), the extent to which a leader is transformational is primarily measured as the leader's effect on followers in terms of trust, admiration, loyalty and respect, often displayed in the motivation to do more than they intended and often more than they thought possible (Bass & Riggio, 2006). This is supported by a number of studies that show a clear relationship between TL and positive organizational outcomes such as

trust, commitment, profit and performance (Bass & Riggio, 2006; Lowe, Kroeck, & Sivasubramaniam, 1996).

## 1.3.2 Transactional leadership (TRK)

TRK has been portrayed as an exchange of rewards for compliance (Bass & Bass, 2008; Burns, 1978). According to Burns (1978), TRK involves the motivation of followers by appealing to their self-interest and their present demands and needs, in contrast to TL, which focuses on developing followers from their "everyday selves" into their "better selves". TRK occurs when the leader communicates to followers and various stakeholders what efforts are required and specifies the conditions and rewards related to the fulfillment of these requirements (Bass & Riggio, 2006). This exchange also involves the leader rewarding or disciplining a follower based on the quality of the follower's performance. Several studies have shown that, under most circumstances, TRK is a fairly effective leadership style in terms of stimulating variables such as commitment, involvement and stress management (Bass & Bass, 2008; Bass & Riggio, 2006).

## 1.3.3 Passive-avoidant leadership (PAV)

In addition to TL and TRK, Bass (1985) originally included a laissez-faire style as a distinct form of dysfunctional leadership behavior. According to Bass and Riggio (2006), this could be seen as absence of leadership. Here, the leader generally avoids responsibility, fails to explicate goals and visions, and leaves problems unattended. Later research has suggested that the management-by-exception passive dimension (e.g. the leader waits for errors to occur before taking action), which was initially defined as a part of TRK, could be combined with laissez-faire leadership to form a new dimension called passive-avoidant leadership

(Avolio & Bass, 2004; Avolio, Bass, & Jung, 1999; Den Hartog, Van Muijen, & Koopman, 1997).

### 1.3.4 The full range of leadership model

In contrast to Burns' (1978) dichotomy between an uplifting and effective TL and a more static and less powerful TRK, Bass (1998) stated in his Full Range of Leadership Model (FRLM) that well-functioning leaders employ a variety of leadership behavior, including both TL and TRK, depending on the situation. In contrast, little PAV is found among effective leaders.

Bass (1998) claims that, in general, TL represents the most effective leadership behavior and should therefore be utilized most frequently, supported by TRK in some situations, for example in high risk contexts related to personal errors or in acute crisis-like situations ((Bass, 1998; Misumi & Sako, 1982). It is also worth noting that several studies show that TL substantially augments the effects of TRK in terms of positive outcomes, providing additional support for the FRLM model (Bass & Riggio, 2006; Waldman, et al., 1990).

### 1.3.5 The relevance of transformational leadership and the full range of leadership model in military operational leadership

Before we turn to the operationalization of the morals component, one question should be addressed: why do we utilize a general leadership theory like TL and FRLM as a representation of effective military operational leadership?

Several writers emphasize that, in order to be effective, leadership should be adapted to the situation (Avolio, 2007; Avolio, et al., 2009). This implies that a well-functioning

military leadership theory must be tailored to the special characteristics of the military operational context. This context can be described as highly ambiguous and unstable, in line with complexity theory (Krulak, 1999; Nissestad, 2007). According to Prigogine (1997), complexity involves non-linear relationships between events, and high sensitivity of the initial condition to outcomes and predictions (i.e. small errors in the assessment of the situation can lead to large unexpected effects).

Military operations can be described as a fluid crisis-context (Krackhardt & Stern, 1988; Nissestad, 2007). Krackhardt and Stern (1988, p. 125) describe "crisis" as a situation that requires the organization, under time constraints, to engage in new, untested, unlearned behavior in order to obtain or maintain desired goal states. Consequently, pre-established regulations and procedures, which are often seen as vital elements in management theories and practices (Bass, 1998), may fall short in a complex crisis situation ((Lichtenstein, et al., 2007). Conversely, TL deals with how to develop individuals into proactive contributors in the leadership process (Bass & Riggio, 2006), including developing followers from reactive "operators" into motivated, reflecting and proactive leaders. This empowerment process may accord well with the demands of a complex military operational environment, which frequently requires decentralized changes of priorities, plans and methods in order to be flexible enough to cope with changing situations (Bass, 1985; Krulak, 1999; Nissestad, 2007; C. Richards, 2004).

Notably, Eid, Johnsen, Brun and Laberg (2004) found that TL was positively related to situational awareness, which entails a better ability to cope with rapidly changing situations. Moreover, Bass and co-workers (Bass, Avolio, Jung, & Berson, 2003) found that platoon leaders and sergeants' TL (and TRK) predicted the unit's level of potency, cohesion and performance in a challenging combat simulation exercise. It should also be noted that

individuals with dispositions such as achievement-orientation, self-esteem, and risk-taking, which we would expect to be dominant orientations among military personnel, are found to be more drawn to transformational leaders (Ehrhart & Klein, 2001). This may explain why a generally higher correlation is found between TL and performance in military samples than in the business world (Judge & Piccolo, 2004).

Krackhardt and Stern (1988, p. 125) also claim that, in time-critical situations that require actions and outcomes that are known, organizations should employ standard, albeit critical, procedures or routines. Such situations frequently arise in military operations as well, for example in connection with search and rescue operations. Here, contingency-oriented leadership, like TRK, may prove effective by structuring and controlling operations and cooperation. This is supported by studies that show that leaders of teams under stress should apply TRK approaches such as contingent rewarding in combination with TL (Bass & Riggio, 2006). On this basis, we expect the FRLM model to be a relevant operationalization of operational leadership, and consequently a relevant subject for the investigation of moral leadership.

## 1.4 What is meant by morals?

In order to investigate the moral components of a leadership theory, clarification is first required of what we are looking for in terms of "morals" (Rhode, 2006).

The term "morals" has a variety of definitions and meanings attached to it (Rhode, 2006). In philosophy, a distinction is commonly found between "ethics" from Greek "ethos" and "morals" from the Latin "mos/mores" (Ciulla, 2004). Both could be translated as habit or custom, but ethics usually refers to ideas about what is deemed to be good (and why it is

so), while morals usually refers to the putting of these ideas into action. According to Rest (1983, p. 558), morals consist of "standards or guidelines that govern human cooperation – in particular how rights, duties, and benefits are allocated". In leadership and psychology research, the terms ethics and morals are often used interchangeably (Ciulla, 2004).

Broadly speaking, in intellectual history, morals has either been defined as objective truth in line with principles deducted from reason or revelation, or as relativistic and subjective norms in line with social conventions (Kurtines & Gewirtz, 1984). According to Rest and Narvaez (1994), until the 1960's, psychology research dominated by behaviorism defined morals as cultural norms, and moral development as socialization and adaptation. In contrast, Kohlberg (1981) and Rest (1979), who were influenced by "the cognitive revolution" in psychology, paid attention to the cognitive process of how people make moral judgments and criticized conformity with social norms as a moral criterion. As an alternative, they advocated an objective definition of morals operationalized as justice. We use this perspective in the present thesis.

## 1.4.1 Can morals be distinguished from other types of social behavior?

Is the categorization of morals as a distinct form of social behaviour, and consequently a distinct area of research, meaningful? Turiel (1983) argues that social conventions and morality are distinct categories that develop as parallel domains. On empirical grounds he characterizes moral behavior as: (1) not alterable (in contrast to social convention), (2) not contingent on authority or social practice, and, in the case of moral transgressions, as (3) judged wrong in any society, and (4) judged as more serious transgressions than are acts in the social conventional domain. This is supported by Folger, Cropancano and Goldman (2005), who find that people's reactions to moral violations differ from reactions to other

categories of social error. On this basis, it could be argued that moral studies are also relevant in the leadership context.

## 1.4.2  Justice as morals criteria

According to Kohlberg (1981, p. 191), to be moral, behavior and cognition must be in accordance with justice principles that encompass: ".. prescriptivity (a distinct concept of an internal duty),  universalizability (a sense that judgements should be those all people can act on), and primacy (of moral over nonmoral considerations)". Greenberg & Colquitt (2005) describe justice as fairness, an exchange and state in which both parties get what they deserve, i.e. a fair share or fair treatment.

Colquitt and co-workers (Colquitt, Conlon, Wesson, Porter, & Ng, 2001) suggest four types of justice as part of the organizational justice concept. In the present thesis, however, we have narrowed the scope to "distributive justice" as the criterion for moral behavior. Distributive justice focuses on the distribution of burdens and benefits in an exchange. According to Homans (1961, p. 75), this form of justice is founded on an assumption that: "A man in an exchange relation with another will expect that the rewards of each man will be proportional to his costs – the greater the rewards, the greater the costs..".

It is worth noting that two distinct principles are usually applied when determining a fair distribution of rights and duties. "Equality" requires that all parties are alike and receive the same, while "equity" implies that benefits should be in proportion to factors such as contribution and responsibility (Greenberg & Colquitt, 2005). Following the equity principle, this may mean that leaders are entitled to more benefits than others, but also that more could be expected of them in terms of hardship and effort. In a military context, this

may imply that, seen from a justice perspective, more should be expected from officers than others in terms of effort and results.

### 1.4.3  What is it that should be moral? What should we measure?

Even with a general definition of morals and the choice of justice as the morals criterion, we still need to decide what to measure in our investigations. The question arises: what is it that should be morally good and just?

According to Bass & Steidlmeier (1999), behavior can be judged to be right or wrong in light of three principal components: (1) the end sought, (2) the means employed, and (3) the consequences. This implies that (at least) three somewhat distinct aspects of morals could be measured in quantitative investigations of morals.

Firstly, the behavior itself could be measured. Here, the evaluative question, in line with virtue ethics, could be: to what extent does this behavior resemble the act of a virtuous person (i.e. justice, courage, wisdom; Bowie, 2006)?  However, the intentions underlying an act could also be considered in an evaluation of moral behavior (Bass & Steidlmeier, 1999; Bowie, 2006; Zimbardo, 2007). For example, if two officers disclose information under interrogation, against orders as well as in breach of moral obligations, and one of the officers does it to help others while the other does it out of self-interest, it could be argued from an intention perspective that the latter failed morally, while the former succeeded.

Finally, from a utilitarian perspective, an act should result in good consequences in order to be judged as moral (Bowie, 2006; Walker, 2006). In the example above, this means that if the withholding of information under torture, judged morally from a virtue and intention perspective, results in aggression on the part of interrogators in a way that leads to

punitive killing and harder torture, the action could be judged to be immoral seen from a utilitarian perspective.

In sum, this implies that behavior in itself, as well as the intentions and consequences related to the behavior, could be measured in studies of morals. However, given the severe consequences that are frequently related to military operational leadership (i.e. life and death, injuries, peace or war), we will utilize a consequence perspective in the present thesis.

### 1.4.4 How can we decide the content of moral behavior?

A moral criterion like justice combined with consequences as a moral perspective is an important part of the operationalization of morals, but how can we decide the content of justice in concrete situations?

Kohlberg (1984) claimed that mature justice principles contain sufficient moral directives to deduce a moral judgment in relation to any moral dilemma. According to Baier (1965, p. 107), this presupposes an objective "moral point of view", described as "independent, unbiased, impartial, objective, disinterested,…[and] in the interest of everyone alike". However, Kohlberg's emphasis on principles has been criticized for being too general to actually serve as a sufficient guide to moral judgments in concrete cases (Krebs & Denton, 2005; Rest, et al., 1999). For example, Pritchard (1991) shows that adopting Kohlberg's mature justice principles can lead to different decisions and lines of action.

On this basis, Toulmin (1981) suggested that intermediate-level concepts, such as intellectual freedom or whistle-blowing, and concrete codes of ethics should supplement justice principles in moral judgments. According to Toulmin, moral guidance from the analysis of specific cases (induction) can be more certain and produce more agreement than

deduction from difficult principles like justice. In the same vein, Beuchamp and Childress (1994) advocated a combination of a deductive top-down and an inductive bottom-up approach to determine the actual content of moral action. Hence, in order to determine moral content, one must engage in a dialectical process and work from both ends. Here, principles function as a tool for analyzing the justificatory basis for specific lines of behavior (i.e. withholding information under interrogation), in search of a coherent "reflective equilibrium" where principle and "best practice" are in mutual agreement. In the present thesis, we have utilized this approach by combining a justice principle with a "best practice" norm that states that prisoners of war shall not disclose information to the enemy.

### 1.4.5  What does it take to act morally?

We have now described various considerations that have been taken into account in the process of defining morals (e.g. what is good?). However, moral leadership presupposes moral behavior (Rhode, 2006). Therefore, an investigation of moral leadership should encompass abilities and processes that enable moral practice. Thus, what does it take to act morally?

In early research, moral behavior in one situation was expected to predict future behavior. However, the classical studies of Hartshorn and May (1928-1930) showed that immoral behavior such as lying and cheating at one measuring point did not predict lying and cheating at the next. This suggested that the production of moral behavior is a multifaceted phenomenon. On this basis, Rest (1986) explicated four psychological processes as individual antecedents of moral behavior, encompassing cognitive, affective and behavioral perspectives within an individual and social psychological framework. These processes include: (1) *Moral sensitivity* (i.e. the ability to perceive moral aspects of a

situation), (2) *Moral judgment* (i.e. the ability to evaluate different lines of actions in terms of morality), (3) *Moral motivation* (i.e. the ability to prioritize moral values over non-moral values) and, (4) *Moral character* (i.e. the ability to act morally even in the face of opposition and complexity).

According to Rest (1986), moral failure can occur due to a deficiency in any of these components, which interact in a complex and non-linear fashion. Consequently, it could be argued that moral leadership encompasses all of these capacities. However, in the present study, we specifically investigate the impact of component 2 (e.g. the ability to activate moral justice schemas), and component 3 (e.g. the self-importance of moral identity) in effective leadership. Accordingly, a positive relation may be an indication of morally-oriented leadership (see figure 1, p. 16).

It is worth noting that Price (2006) claims that moral failure in leadership stems from a component 2 cognitive bias in terms of leaders' self-exclusion from commonly held moral imperatives. This bias is based on the idea that the collective nature of the ends to which they as leaders are particularly committed justifies the application of immoral means. In contrast, Ludwig and Longenecker (1993) see leaders' moral failures as volitional and, consequently, a component 3 shortcoming. Accordingly, leaders fail to resist temptation and prioritize non-moral values over morals. In the following, we will present the theory of moral justice schema activation and self-importance of moral identity, utilized as individual antecedents of moral behavior and, consequently, as a prerequisite for moral leadership.

## 1.4.6  Activation of moral justice schemas: a component 2 individual antecedent of moral behavior

The theory of cognitive moral development (CMD) singles out cognition as a vital source of moral behavior (Rest, et al., 1999). CMD assumes an ongoing life-span development of

qualitatively different meaning-making systems, where each system is more complex than the previous one as a result of including, differentiating and integrating a more diverse range of experiences (McCauley, Drath, Palus, O'Connor, & Baker, 2006). Rest et al. (1999) define these meaning systems in terms of schema theory. These schemas are general cognitive structures of content stimulus configuration (i.e. justice concepts) that provide a skeletal conception that is exemplified or instantiated by particular experiences in a "top-down" processing of information. In this way, the schemas provide a basis for evaluating experience and anticipating the future, as well as affecting the speed of information processing and moral problem-solving (Rest, et al., 1999).

Rest et al. (1999) define three qualitatively distinct schemas of justice, operationalized in line with Kohlberg's six stages of justice development (see table 1;Kohlberg, 1981).

**Table 1 Kohlberg's six stages of justice concepts** (Rest & Narvaez, 1994, p. 5)

| | |
|---|---|
| Stage 1 | The morality of obedience: do what you're told. |
| Stage 2 | The morality of instrumental egoism and simple exchange: let's make a deal. |
| Stage 3 | The morality of interpersonal concordance: be considerate, nice, and kind: you'll make friends. |
| Stage 4 | The morality of law and duty to social order: everyone in society is obligated to and protected by the law. |
| Stage 5 | The morality of consensus-building procedures: you are obligated by the arrangements that are agreed to by due process procedures. |
| Stage 6 | The morality of non-arbitrary social cooperation: morality is defined by how rational and impartial people would ideally organize cooperation. |

The (1) "Post-conventional schema" (PCS) includes Kohlberg's stages 5 and 6 and is defined as the most mature and sophisticated moral justice concept. Rest et al. (1999) describe four basic elements in this schema: (1) Primacy of moral criteria (e.g. loyalty towards moral principles over social convention), (2) Appealing to an ideal (e.g. providing guidance for ideal cooperation), (3) Shareable ideals (e.g. justification in relation to those involved), and (4) Full reciprocity (e.g. opening for scrutiny of moral arrangements by all involved parties). This level of CMD could also be described as an independent order (McCauley, et al., 2006) that is indicative of leaders who rely on their own internally generated values and standards in the production of moral judgments. Several studies have demonstrated a positive but moderate relation between PCS and moral behavior (Blasi, 1980), as well as leadership behavior (Bass & Bass, 2008; Turner, Barling, Epitropaki, Butcher, & Milner, 2002).

"The maintaining-norms schema" (MNS), which includes Kohlberg's stage 4, represents a moderate level of CMD (Rest, et al., 1999). Here, moral judgments are structured by external factors such as rules and regulations and motivated by a need to maintain the established social order. However, this line of reasoning does not encompass critical evaluations of the moral content of the rules and regulations that guide the moral judgments. Consequently, a leader who scores high on MNS-orientation may commit moral transgressions if the rules applied are immoral.

Lastly, "the personal-interest schema" (PIS) encompasses Kohlberg's stages 2 and 3, and represents a more egocentric justice orientation. Here, moral judgments are instrumentally oriented to optimize the selfish aims of the leader, without consideration for others. Rest et al. (1999) claim that moral development can be seen as the gradually diminishing activation of this schema to the benefit of more developed concepts of justice.

In sum, this leads us to expect moral leadership to be exercised by leaders with frequent PCS activation, at the expense of both egocentric PIS activation and conventional MNS activation.

### 1.4.7  Self-importance of moral identity: a component 3 individual antecedent of moral behavior

While activation of moral justice schemas supports the process of finding a good moral solution to a problem, moral identity represents the moral consciousness that motivates us to transform a moral solution into action. According to Aquino and Reed (2002), moral identity can be seen as part of the social identity that forms the basis for social identification and self-definition. According to Hardy and Carlo (2005), moral identity is a complex and multifaceted aspect of morality, which generally entails integration of the moral and self system such that there is some degree of unity between one's sense of morality and one's sense of identity. In their definition of moral identity, Aquino and Reed (2002) identify two distinct dimensions of the moral self: a) internalized moral identity (i.e. the private and personal arena) and, b) symbolized moral identity (i.e. the external and public arena).

A vital part of the conception of moral identity is the extent to which the elements most central to an individual's identity (e.g. values, goals, and virtues) are moral (Hardy & Carlo, 2005). Consequently, a high self-importance of moral identity encompasses an effort to reflect moral values in social interaction (i.e. by participation in charity work, buying an environmentally-friendly car, etc.), and a strong body of internalized moral values that activates an inner sense of moral consciousness. This means that, if moral values are an important part of an individual's identity, this provides motivation to behave in line with one's sense of morality, stimulated by self-regulatory mechanisms that activate emotions like guilt and anxiety in cases of moral transgression (Aquino & Reed, 2002; Blasi, 2004). This implies that people with a

strong moral identity, indicative of a high moral motivation (Hardy & Carlo, 2005) , experience

stronger negative emotions in the face of moral failure, and, consequently, a stronger drive

towards moral behavior than others.

This claim has been partially supported. For example, Aquino and Reed (2002) found

that high moral identity predicted moral behavior such as food donations to a charitable cause.

Moreover, individuals of high moral identity are found to display more pro-social attitudes and

behavior towards out-group members than others (Reed & Aquino, 2003), and are less

susceptible to moral disengagement mechanisms (Aquino, Reed, Thau, & Freeman, 2007).  In

sum, this leads us to expect morally-oriented leaders to have high self-importance of moral

identity and a high moral motivation.

## 1.4.8  Contextual antecedents of moral behavior in operational leadership

Individual moral capacities such as moral motivation and mature moral reasoning are

important influences on moral behavior (Rest & Narvaez, 1994). However, a large body of

research also finds that situational characteristics can drastically influence the effect on

individual moral capacities and transform good people into evildoers (Zimbardo, 2007). This

suggests that moral leadership presupposes the ability to cope with aspects of the leadership

situation that may drive leaders to commit moral transgressions, in particular in situations in

which followers (and others) perceive the moral imperatives of the situation as important to

comply with.

In the present thesis, we define (1) temptations (e.g. gaps between their own self-

interest and moral imperatives; Price, 2006), and (2) loss of sleep (Haslam & Abraham,

1987) as situational antecedents that are highly prevalent in military operational contexts,

and that may negatively influence moral behavior and leadership. Conversely, we suggest

that situations of (3) high moral intensity (e.g. clear and commonly perceived moral norms, substantial consequences; Jones, 1991) may stimulate moral behavior, partially due to high follower expectancies (and hopes) that the leader will master the moral challenges present.

## 1.4.8.1 Temptation and "The Bathsheba- syndrome": a contextual antecedent of moral behavior

Morals can be seen as a product of lack of opportunity (Zimbardo, 2007). Consequently, morals are something you engage in when the opportunity to do the contrary is obscured. According to Ludwig and Longenecker (1993), leaders are particularly exposed to opportunities and pertaining temptations. They portray King David's lust for Bathsheba, the wife of Uriah, and the subsequent killing of Uriah at David's command as exemplifying the moral temptations and failures that may confront leaders (i.e. "the Bathsheba syndrome"). In an executive position, the leader has power that enables him/her to influence the environment more than others. Given that leaders are motivated by egoistic aims, this opens up opportunities and motivation for personal gain through moral transgressions (Price, 2006).

According to Ludwig and Longenecker (1993), this temptation is particularly difficult to tackle when leaders are successful and complacent. Complacency frees up a leader to act on temptations that are the result of privileged access, and unrestrained control of resources feeds the leader's inflated belief that he/she can conceal his/her actions and their effects when these temptations have been transformed into transgressions.

Such temptations may be a particular challenge in military operational leadership. During combat operations, officers may frequently encounter situations where the leaders' self-interest in forms of personal welfare and security (i.e. force protection) stands in

contrast to a moral imperative to protect civilians and proportional use of force against the enemy (Fick, 2006; Walzer, 1977).  On this basis, it could be argued that military leaders must develop a particularly strong moral character in order to resist temptation related to their executive position.

### 1.4.8.2 Sleep deprivation: a contextual antecedent of moral behavior (?)

Enduring military operations may involve long periods of sleep loss (Fick, 2006; Haslam & Abraham, 1987). Several studies have been conducted over the years in order to investigate how sleep deprivation impairs cognitive and physical performance. These studies show that sleep deprivation in general impairs performance of a wide range of cognitive tasks and sensory functions such as mental arithmetic, logical reasoning, memory, and vigilance, as well as meta-cognition (Blagrove & Akehurst, 2001; Harrison & Horne, 2000). Lack of sleep has even been assumed to be the cause of catastrophic accidents such as the Three Mile Island incident (Mitler, et al., 1988). Moreover, sleep-deprivation has been linked to laissez-faire attitudes to leadership responsibilities as well as general tendencies to ignore one's surroundings (Haslam & Abraham, 1987), seemingly in concert with reduced moral perspectives. In contrast, some studies show that the ability to apply standard operational procedures, drills and regulations is less vulnerable to sleep deprivation (Kobbeltvedt, Brun, & Laberg, 2005). This may imply that rules can contribute to the stability of moral behavior, even during sleep deprivation and impaired cognitive capacity.

Research has also demonstrated that tasks dependent on the prefrontal cortex are particularly sensitive to loss of sleep (Harrison, Horne, & Rothwell, 2000), providing a neuroanatomical localization of the observed cognitive impairments. Notably, functional neuroimaging studies suggest a prominent role for the medial prefrontal cortex in the

formation of moral judgments (Killgore, et al., 2007). This may mean that moral reasoning is particularly vulnerable to sleep loss, which, in turn, may explain possible impairment of moral behavior and leadership during military operations. On this basis, we investigated the effects of sleep loss on military leaders' ability to activate moral justice schemas, which, in turn, are expected to explain moral behavior and leadership (Bass & Bass, 2008).

## 1.4.8.3 High moral intensity situations: a contextual antecedent of moral behavior

According to Jones (1991), people assign greater importance to moral behavior and moral concerns in some situations than others, depending on the moral intensity of the situation. Moral intensity can be determined by (1) the magnitude of the consequences that actions will have for others, (2) the strength of ethical norms related to the situation, (3) the probability of the effect, and (4) the temporal immediacy of the event itself (Beu & Buckley, 2004; Brown & Treviño, 2006). While low moral intensity situations will challenge the ability to recognize ethical aspects in a complex situation, high moral intensity situations will challenge moral character, discipline, and the ability to act in accordance with ethical norms in a more direct way – even when such behavior requires personal sacrifice (Jones, 1991; Rest & Narvaez, 1994).

It could be argued that a high moral intensity situation may stimulate leaders' moral behavior through expectancy mechanisms and social conformity (Bass & Bass, 2008). It could further be argued that moral failures in such situations may severely reduce followers' trust in the leader, and, consequently, the leader's influence (Jones, 1991). Thus, a situation of high moral intensity combined with strong elements of temptation, as found in study 3 of this thesis, may represent a particularly challenging leadership situation. Furthermore, given

the severe consequences related to moral failures in contemporary military operations (Bartone, 2005; Taguba, 2004) and the expected high focus on moral conduct in such operations (FM6-22, 2006), leader behavior in a high moral intensity setting may be an important field on which to conduct research.

## 1.5 Good military operational leadership: the art of saints or the art of villains?

We have now outlined our overall research model, and operationalized the morals and leadership variables included in the investigation. In the following, we will outline the theoretical basis for the present thesis's main objectives and research questions. We do this by posing two questions: 1) what is the relationship between morals and leadership? and 2) in what ways do morals contribute to the leadership process? In order to address these questions, two contrasting perspectives on morals and leadership will be described. One perspective regards morals as an obstacle to effective leadership, while the other places morals at the heart of effective leadership. We choose this contrast to illustrate that, even though we expect morals to be a prerequisite for effective operational leadership, that is not necessarily the case when it comes to empirical evidence and "real life".

### 1.5.1  The art of villains? Immorality as the foundation of effective leadership

In his suggestion of "strategic betrayal" as a leadership prerequisite, Krantz (2006, p. 236) reasons: "Perhaps the sunny, idealized images of leaders who transform through inspiration, passion, and love function as a social defense against the darker more troubling realities of leadership." However, no contemporary leadership theories seem to be based on the assumption that immorality and manipulation are core leadership competencies. Nevertheless, we have extracted two perspectives from the leadership literature converging

on the assumption that important aspects of effective leadership include behavior that can be defined as immoral.

## 1.5.1.1 A power perspective on immoral leadership

From a power perspective, the primary goal of leadership is to obtain and maintain power (Rosenthal & Pittinsky, 2006). This means that a main leadership task involves obstructing competitors in order for the leader to achieve his/her goals and visions (Machiavelli, 1513/1961). According to Bailey (1988) and Ledeen (1999), history contains a number of culturally diverse examples of how successful leaders are prepared, willing and able to use all necessary means, including unrestricted violence and manipulation, to protect their power base and their ability to influence followers. Without such means, they argue, the leader will soon be overthrown by opponents and conflicting interests.

Ledeen (1999, p. 90) emphasizes that human beings in general are passion-driven animals, and therefore ".., all manner of nastiness may be required to keep us under control.." This implies that manipulation, deceit and destruction are vital leadership tools in order to avoid "..domination by others or disintegration caused by the rot within" (Ledeen, 1999, p. 88). This statement is partially supported by Rosenthal and Pittinsky (2006), who find that narcissism, in terms of traits such as arrogance, self-absorption and hostility, is an attribute of many powerful leaders generally motivated by needs of power and admiration.

Along the same lines, Martin & Sims (1956, p. 25) stated that leaders are politicians who deal "with relationships of superordination and subordination, of dominance and submission.." . They claim that such relationships require the use of various power tactics in order to get the job done and to strengthen and enhance the leader's position. Examples of such power tactics can be to agree to compromises but still press ahead with personal goals,

to delay actions that are against their own interests and avoid personal relations with subordinates.

## 1.5.1.2 A developmental perspective on immoral leadership

A developmental perspective on immorality as the foundation of effective leadership emphasizes leaders' exemption from general morality as a prerequisite for change and development. Bailey (1988, p. ix), argues that:

> ..no leader anywhere - that is, no successful leader - can ever be immaculate. .. no leader can survive as a leader without deceiving others (followers no less than opponents) and without deliberately doing to others what he would prefer not to have done to himself. Leadership and malefaction everywhere and at all times go hand in hand.

Bailey claims that leaders who are conventionally virtuous are likely to be ineffective. A leader is above morality because he must deal with the real world, which is unpredictable and complex, and therefore not understood and regulated by existing order. This description is close to an operational context characterized as ambiguous and complex (Nissestad, 2007). Bailey claims that, to deal with the unknown effectively and to maintain order and control, a leader must apply methods that are unrestricted by moral norms.

Krantz (2006) finds "virtuous betrayal" a precondition for effective leadership and organizational change. Accordingly, in order to develop and transform a group in accordance with external requirements, the leader is bound to deceive his/her followers by violating trust, confidence and agreements that maintain the status quo. In the course of such a process, the leader may place importance on being perceived as moral by his/her followers for as long as possible (Krebs & Denton, 1997), in order to avoid actions being taken by an

opposition before the changes are ready for implementation. This may be particularly important in an operational context, where changes may involve increased personal risk and hardship on the part of the followers.

In the same vein, Ferris, Zinko, Brouer, Buckley and Harvey (2007) suggest "strategic bullying" as an effective leadership approach. Accordingly, a leader's aggressive behavior and negative emotions towards followers can function as an effective mechanism of influence in achieving personal and/or organizational aims. In cases of strategic bullying, an audience will attribute blame in the situation; to the leader or the victim. The audience might perceive that the victim has actually encouraged the bullying. At the same time, the audience may compare their own behavior to that of the victim in a way that drives them to alter their own behavior in order to avoid bullying themselves.

It is also noteworthy that Conger and Kanungo (1998) suggest that powerful leadership such as TL, by building on charismatic leadership, may thrive on manipulation and immorality. By arousing emotions, displaying self-confidence in the face of threats and crises (e.g. a risky military operation), and presenting an image of impeccable moral standards, the leader may "seduce" a group into evildoing. In such cases, the followers will be deceived into perceiving their leader as a moral role model. Sankowsky (1995) finds that such powerful charismatic leadership is supported by symbolic power (e.g. the tendency of followers to tacitly view leaders as father figures). Here, the leader is prone to commit subtle abuses of followers through transference mechanisms (e.g. symbolizing leaders as parents). In such relations, followers tend to be highly motivated to gain the leader's personal approval, which makes them susceptible to transforming their own perceptions, emotions, and thoughts to bring them into line with the leader's standpoint. Consequently, in particular

in the form of charismatically-oriented "idealized influence" and "inspirational motivation", TL may involve manipulation, abuse and self-centered power tactics as well as deception.

Such manipulation and charismatic leadership may require particular leader personalities. For example, Maccoby (2000, 2004) claims that productive narcissistic leaders are a precondition for organizations' survival in a rapidly changing and chaotic world, of which military operational reality is one example. Narcissistic leaders develop grand visions because they are inspired by a personal need for a legacy and power. Moreover, these leaders are portrayed as charmers who can convert the masses with their rhetoric in order to shape a common focus and attract devoted followers who bolster the leaders' confidence. These claims have been partially supported by Deluga (2001), who found a positive connection between Machiavellianism in US presidents and their levels of charismatic leadership and performance.

In sum, we believe that the mechanisms described here underscore the importance of addressing the issue of morals and effective operational leadership. These arguments show us that there is no self-evident positive relation between the two constructs.

## 1.5.2 The art of saints? Morality as the foundation of effective leadership

In contrast to the claims described in the previous sections, we propose as a general hypothesis that effective operational leadership is carried out by leaders with a stronger moral orientation. In the following sections, we will outline these expectations in some depth.

## 1.5.2.1 Cooperation as the basis for morals and leadership

In general we expect that morals can be related to leadership through the concept of cooperation. According to Krebs & Denton (2005), all systems of cooperation are threatened by selfishness and other forms of immoral practice. They state that, if everyone tries to take more than their share in a system of cooperation or hold back on their own contributions, the system may collapse into self-defeating battles. The larger the group involved, the more vulnerable the system is to free-riders and egocentrism. On this basis, all robust groups create and adhere to moral norms they believe to be necessary to uphold cooperation. Therefore, given that leadership involves goal-oriented cooperation (Bass & Bass, 2008), it could be claimed that morals are at the heart of the leadership task.

This emphasis on morals in leadership is supported by Brown and Treviño (2006), who find leaders' moral behavior instrumental in producing effective cooperation. Consequently, leaders' ability to communicate the importance of moral standards and their use of incentives to hold employees accountable for their actions are found to be vital methods in the exercise of good and productive leadership (Brown, et al., 2005).

Several studies seem to support this notion. For example, Den Hartog, House, Hanges, Ruiz-Quintanilla, and Dorfman (1999) found that leaders' integrity and trustworthiness is related to a positive evaluation of their leadership. Others find that moral leadership in the form of justice behavior enhances performance through the stimulation of intervening variables such as organizational citizenship behavior, trust, sense of duty and cohesion (Greenberg & Colquitt, 2005).

Conversely, studies find that immoral behavior such as leaders' abusive supervision causes a decrease in organizational citizenship behavior (Zellars, Tepper, & Duffy, 2002) and an increase in counterproductive behavior (e.g. behavior harmful to the organization or

other employees; Brown & Treviño, 2006). In the same vein, perceptions of injustice are found to produce negative effects such as health problems, increased turnover, and reduced commitment (Greenberg & Colquitt, 2005). Notably, such perceptions of injustice are found to be a particularly strong explanation for loss of meaning among military troops (Bartone, 2005), and the distortion of cohesion among fighting troops in Vietnam (Shay, 1995). It is also worth noting that Shay (2002) finds problems of reintegration and posttraumatic stress disorders to be related to a general experience of injustice.

In sum, this leads us to expect effective operational leadership to be closely related to the exercise of morals, and, in particular, the exercise of justice. In the following, we outline this position in some depth in relation to FRLM and military operational demands.

### 1.5.2.2 Transformational operational leadership: moral development for comitment and cooperation (?)

A well-functioning cooperation may depend on striking a fair balance between rights and duties (Kohlberg, 1981; Krebs & Denton, 2005). However, what this balance consists of may vary (Finkel & Moghaddam, 2005). In some organizations, there may be a great focus on rights, while other organizations and groups have a stronger emphasis on duties. In a military setting, the duty of military officers is to protect the common good, risking their life and health. This represents a major motivational task. How can we motivate troops to risk their own lives in the line of duty, endure hardship and extreme experiences of loss and danger? Such duties and strains call for a particularly motivating leadership that develops cohesion as well as community commitment (FM6-22, 2006). Here, a strong justice-oriented leadership and the transformation of values from self-orientation into a community focus seems to be of paramount importance.

According to Burns (1978, p. 20), "transforming leadership ultimately becomes moral in that it raises the level of human conduct and ethical aspiration of both leader and led, and thus it has a transforming effect on both." Bass (1998, pp. 17, 170) explicates this claim by stating that ".. the truly transformational leaders who transcend their own self-interest for one of two reasons: utilitarian or moral…If a matter of moral principles, the objective is to do the right thing, to do what fits the principles of morality…" Accordingly, transformational leaders develop followers' values into a community commitment by personal example, which again is as an important challenge in operational leadership.

This is achieved in particular through "idealized influence",  which has been shown to produce a high degree of attraction among followers and personal identification with their leader(s) (Bass & Riggio, 2006). Brown et al. (2005) describe such influence in terms of social learning theory. According to Bandura (1986), leaders who, in addition to power and status, demonstrate care and treat others fairly, attain enhanced credibility and attractiveness as role-models. Here, the ability to "walk the talk of morals" is emphasized as central (Bandura, 1986; Bass & Steidlmeier, 1999, Simons, 1999) to maintaining trustworthiness and model attractiveness (Bandura, 1986; Bass & Steidlmeier, 1999; Simons, 1999). This is supported by Halverson, Holladay, Kazama, and Quiñones (2004), who find that self-sacrificing behavior that involves  "the total/partial abandonment, and/or temporary postponement of personal interests and privileges in division of labour or distribution of rewards, etc" in the face of crisis (Choi & Mai-Dalton, 1998, p. 479) is positively related to charismatic (and transformational) leadership. In other words, those leaders who  have the ability to carry at least as great a burden on their shoulders as they expect from others, and consequently embody a more than fair division of labor and privileges under challenging circumstances, seem to stand out as transforming and motivating role models. Such practice stands in contrast to abusive charismatic leaders who, in situations in which they have

misread the situation or made mistakes, generally blame others and hold followers or

external parties responsible for substandard outcomes (Sankowsky, 1995). It should also be

noted that Parry & Proctor-Thompson (2002) find that behavioral integrity (e.g. commitment

in action to a morally justifiable set of principles and values) is positively related to TL.

It is also worth mentioning that Brown et al. (2005) identify the promotion of moral

behavior through two-way communication, in line with the TL facet of "intellectual

stimulation", as a central part of ethical leadership and robust cooperation. Here, the

communication of an ethical and value message is seen as paramount (Brown & Treviño,

2006). According to Bass & Steidlmeier (1999), an effort to develop followers' moral

perspective, and, consequently, a collective orientation, presupposes open discourses

through which followers are helped to question assumptions, especially related to the

normative side of ethics. Along the same lines, Gottlieb and Sanzgiri (1996) emphasize that

leaders with moral integrity always encourage open and honest communication. One notable

study by Dukerich, Nichols, Elm, and Vollrath (1990) shows that leaders' activation of

mature justice schemas has an impact on followers' level of justice reasoning. According to

Kohlberg (1984), such a development presupposes an open discourse in which the learners

are exposed to mature moral reasoning above their own level. In sum, this leads us to expect

that good operational leadership, operationalized as TL, includes a strong morals component.

## 1.5.2.3 Transactional operational leadership: establishing and protecting rules of cooperation and performance

Even though the transformation of followers' moral values is an important approach in order

to bolster commitment towards the common good, it could be argued that this somewhat

idealistic approach should be supplemented by mutually binding agreements related to the

distribution of duties and rights. Consequently, it will be an important leadership role to

establish and maintain agreements that balance the self-interests of different stakeholders in

a social cooperation (Bass & Steidlmeier, 1999). This is also emphasized by Brown & Treviño (2006), who see the establishment and maintenance of (moral) rules and agreements as a necessary aspect of ethical leadership and cooperation. According to Burns (1978), the establishment of and commitment to such regulations is dependent on moral values such as honesty, fairness, responsibility and reciprocity. These values function as buffers against parties to a mutually binding cooperation taking advantage of others, which could obstruct cooperation by creating distrust and disintegration.

Along the same lines, Walker (2006) argues that TRK, by accepting that human nature is essentially selfish, has a realistic starting point for achieving such cooperation. By establishing mutually binding norms between a variety of stakeholders and by ensuring that everyone abides by these norms, the actors learn that cooperation brings them considerable benefits. Consequently, all parties will strive to meet their common obligations, and not risk taking advantage of others for short-term benefits. This is supported by studies suggesting that TRK leader behavior (as contingent reward) can be instrumental in creating strong justice climate perceptions, which, in turn, promote employee-positive attitudes and cooperation (Walumbwa, Wu, & Orwa, 2008).

In sum, this makes us expect that, as an important aspect of operational leadership, TRK encompasses a strong morals component.

## 1.5.2.4 Passive-avoidant operational leadership: avoiding moral responsibilities (?)

While TL is portrayed as leadership that actively utilizes morals in order to develop followers from a self to a community focus (Bass & Steidlmeier, 1999), and TRK is portrayed as leadership that actively utilizes morals in order to produce a stable exchange among stakeholders (Walker, 2006), laissez-faire leaders are portrayed as generally being

indifferent to what is happening around them (Bass & Riggio, 2006). They avoid taking a stance, focus little on results and refrain from intervening. This could be defined as destructive leadership (Skogstad, et al., 2007), which also fails to meet moral justice obligations (i.e. taking one's share of responsibility). Such avoidant leadership has been related to several negative consequences, such as conflict levels, role ambiguity, bullying and distress (Skogstad, et al., 2007). In a military operational context, such avoidance stands in stark contrast to operational requirements (Nissestad, 2007; C. Richards, 2004).

Furthermore, Parry and Proctor-Thomson (2002) found a negative relation between PAV and followers' perception of the leaders' behavioral integrity (e.g. walking the talk of ethics). Their investigation showed that, of all the leadership styles, laissez-faire explained the greatest variation in perception of integrity. In sum, this leads us to expect a negative relation between PAV and morals in a military operational context.

## 1.6 Research aims and questions

The present thesis was carried out to gain knowledge about how and whether leadership, in terms of transformational leadership and the Full Range of Leadership Model, encompasses morals in a military operational context and how such a leadership context may influence morals. This main aim was divided into three separate studies:

### 1.6.1 Does activation of moral justice schemas and self-importance of moral identity explain effective operational leadership (Study 1)?

The aim of the first study was to explore whether, and how much, the two individual antecedents of moral behavior, (1) moral justice schema activation, and (2) self-importance of moral identity, predicted variance in operational leadership behavior.

### 1.6.2 How does sleep deprivation influence activation of moral justice schemas (Study 2)?

Given that activation of moral justice schemas has been shown to predict effective leadership behavior (Turner, et al., 2002) and moral behavior (Rest, et al., 1999), a study of how contextual factors in a military operational environment influence this individual moral capacity may be relevant. Lack of sleep has been shown to impair cognitive processing in general, and it has also been found to be prevalent in military operations (Haslam & Abraham, 1987). On this basis, the aim of the second study was to explore how partial sleep deprivation influences the activation of moral justice schemas.

### 1.6.3 Does effective operational leadership predict moral behavior in a situation of high moral intensity and temptation (Study 3)?

Even though previous studies have shown that there are positive relations between individual antecedents of moral behavior and effective leadership, these results are only indications of a positive relationship between actual moral behavior and leadership. Such results do not provide solid evidence that effective operational leadership actually "walks the talk of morals". Therefore, in the third study, we aimed to explore the relation between

operational leadership behavior and moral behavior in an operational context encompassing high moral intensity and temptations.

# 2. Methods

## 2.1 Study samples

### 2.1.1 Study 1

The participants in study 1 were first-year ($n = 95$), second-year ($n = 47$), and third-year ($n = 48$) cadets at the Norwegian Naval Academy (RNoNA). The mean age for the total sample ($N = 190$) was 24.6 years ($SD = 4.08$; range 20 – 33 years), and they had an average of 2.8 years of service before entering the academy. Seventeen (9%) of the total sample were women. Of the total sample, 167 cadets (88%) responded to the survey. At the time of the data collection, eight cadets (4%) were absent on other duties, while 15 cadets (8%) chose not to participate. All participants had a minimum of one year of military service before entering the academy, and they were all screened to ensure good physical and mental health and cognitive aptitude prior to admission.

### 2.1.2 Study 2

The participants in study 2 were first-year officer cadets at the RNoNA ($n = 42$) and the Norwegian Army Academy ($n = 50$). The mean age for the total sample ($N = 92$) was 24.2 years (SD = 4.18; range 22 – 32 years) and seven (8%) were women. A total of 71 cadets (77%) participated in all parts of the study. At our first data collection, six cadets (7%) were absent due to other engagements. At the time of the second data collection, eight cadets (9%)

were absent due to various medical conditions disqualifying them from participation in the field exercise that framed the testing. Seven cadets (8%) chose not to participate.

### 2.1.3 Study 3

The participants in study 3 were also first-year cadets ($N = 93$) from the RNoNA (not the same cohort as in studies 1 and 2). The mean age of the cadets was 23.6 years ($SD = 4.08$; range 20 – 33 years). Six (6%) of the cadets were women. At the time of the data collection, six cadets (6%) were absent for medical reasons, while five cadets (5%) chose not to participate in the study. Thus, an effective sample of 82 cadets (88%) was included in the analysis.

## 2.2 Procedures

The research was approved by the RNoNA and the Navy Staff of Education, as well as the Regional Research Ethics Committee. Some time before the data collection for each of the studies (two months before in study 3 and one week before in studies 1 and 2), the subjects received written information and a briefing about the main purpose of the research. Subjects were informed that participation was voluntary and that they could withdraw from the experiment at any time. Subjects signed a declaration of consent and completed the questionnaires on an individual basis. They were informed that the results were for research purposes and that individual results would not be used in any performance assessment at the RNoNA. In all studies, data were manually transferred to SPSS (14.0 and 15.0) for statistical analysis.

### 2.2.1 Study 1

In study 1, peer ratings of leadership behavior and two measures of latent moral variables (e.g. moral justice schema activation and self-importance of moral identity) were collected from three cohorts of cadets in classroom settings.

### 2.2.2 Study 2

In study 2, subjects participated in an experiment with a repeated measures design, consisting of two conditions (rested and sleep-deprived). In rested condition, the cadets completed the DIT-2 test in a classroom setting, and in a briefing room in the sleep-deprived condition. In order to control for circadian variation, the DIT-2 data in the sleep-deprived condition were collected between 5 and 6.30 a.m. for both groups, and between 7.30 and 8.30 a.m. in the rested condition. In order to confirm that the subjects were in significantly different states of sleepiness in the partially sleep-deprived condition compared to the rested condition, the Stanford sleepiness scale (SSS) was calculated at all measuring points. To control for potential order effect, a counterbalanced design was used (Cozby, 2005), whereby half the sample completed the DIT-2 in the rested condition one week before the sleep-deprived condition, and the other half completed the DIT-2 one week after the end of the exercise.

### 2.2.3 Study 3

Study 3 utilized a quasi-experimental design in a study of moral behavior, indexed as disclosure of information during a true-to-life prisoner of war (POW) exercise. Here, we collected peer ratings of the cadets' leadership behavior about one week prior to the POW

exercise. These evaluations were based on eight months of challenging leadership training in which the cadets worked in squad size units during stressful exercises lasting up to three months, providing them with thorough knowledge of each others' leadership behavior. Three weeks before the POW exercise, the cadets were given a briefing by an expert interrogator about different interrogation techniques and coping strategies relevant to a POW situation in order to enhance coping and training effects. Here, the cadets were instructed only to communicate their military number, rank, date of birth, and name if questioned by enemy forces.

Prior to the exercise, we conducted a two-hour training session with the expert interrogators, who were responsible for registration of the cadets' information disclosure during the interviews, in order to establish a common outlook on which information was to be registered. At the start of the tactical exercise that framed the POW situation, the cadets received a classified briefing, providing detailed sensitive strategic and tactical intelligence information. During the POW part of the exercise, which lasted for approximately 15 hours, the cadets were detained and placed in a hostile environment that included noise and physically stressful positions, and exposed to four individual interrogation interviews in which expert interrogators recorded all disclosures of information. After the exercise, a debriefing session was conducted, supervised by a psychologist.

## 2.3 Ethical concerns

Three ethical concerns were discussed in particular with the Regional Committee for Medical Research Ethics, Western Norway, concluding in approval of our approach.

### 2.3.1 Forced (informed) consent?

Given that the author of the present thesis serves as a teacher and officer at the RNoNA, it is possible that the cadets would be influenced to participate in the research against their own will. In order to reduce such pressure, researchers from the University of Bergen who were unfamiliar to the cadets provided the information about the studies and performed the collection of the informed consent forms. To avoid other sources of pressure, no staff from the RNoNA were present during collection of the consent forms. Furthermore, it was emphasized, both verbally and in writing, that participation was voluntary and that the cadets could withdraw from the studies at any time, without explanation. To achieve this, an e-mail procedure was established, enabling the cadets to withdraw through a "neutral" third party at the University of Bergen.

### 2.3.2 Insufficient information in the informed consent?

Another problem was related to the amount of information that could be given prior to the POW exercise (POW), given that the RNoNA emphasized that the exercise should be launched unexpectedly, and that the content should be partially unfamiliar to the cadets. Such limitations may violate the duty to inform participants thoroughly about the aim and content of an experiment as well as the starting point, before they choose to participate (WMA, 2008). In order to avoid disclosure of the starting point, the information was provided two months in advance of the exercise. Moreover, the aims of the study were described in general terms as an investigation of moral behavior and leadership under stressful conditions, possibly involving situations in which the cadets are in a captivity situation. In this way, the cadets were given an understanding of the situation and the

hardship related to the study context without us as researchers compromising the elements of surprise and the training effects.

### 2.3.3 Does the research inflict harm on the respondents?

Finally, given that the POW exercise (study 3) involves both physical and mental coercion, it could be argued that the risk of injuring the cadets physically and mentally outweighed the value of the research (WMA, 2008). However, it should be noted that the POW exercise is a mandatory part of the education at the RNoNA. Therefore, the present study did not result in any extra strain on the cadets. Furthermore, a previous study showed that the cadets in general cope well with the exercise in terms of traumatic reactions (Eid, Brun, Laberg, & Johnsen, 1998). In a comparison to medical students participating in a mandatory dissection course, the cadets displayed significantly lower post-reactions. It should also be noted that the cadets were debriefed after the exercise under supervision of a psychologist and monitored and supported by supervisors during the months after the exercise in order to control for negative reactions.

## 2.4 Instruments

The present thesis encompasses measures of (1) leadership behavior, (2) moral schema activation, (3) self-importance of moral identity, (4) subjective sleep deprivation, and (5) moral behavior.

## 2.4.1 Leadership behavior: The Multifactor leadership questionnaire

The Multifactor Leadership Questionnaire (MLQ-5X; Bass & Avolio, 1995) contains 45

items describing leadership behavior and attributions, each rated on a five-point scale (0 =

rarely, 4 = to a large extent). The MLQ enables self-scores and multi-source assessments of

leadership behavior. Peer assessment was used in the present study. This approach reveals a

more complex picture of how the leader is seen than self-scores (Warr, 2002). The

Norwegian translation was developed through a back-translation procedure (Eid, et al.,

2004). In studies 1 and 3, we extracted three outcome variables indexing transformational,

transactional, and passive-avoidant leadership behavior, with internal consistency of $\alpha = .91$,

$\alpha = .64$ and $\alpha = .78$, respectively.  In addition, facet scores for the three dimensions were also

constructed, revealing internal consistency of $\alpha \geq .64$ for the TRK facets, $\alpha \geq .54$ for the TRK

facets, and $\alpha \geq .58$ for the PAV facets. The facet of management-by-exception – passive,

traditionally included in transactional leadership, was combined with laissez-faire leadership

in the passive avoidance index (Den Hartog, et al., 1997; Hetland, 2004). Permission was

obtained from the developers of MLQ to use their scale for the purpose of this research.

## 2.4.2 Activation of moral justice schemas; the Defining Issues Test

The Defining Issues Test (DIT-2; Rest, 1979; Rest, et al., 1999) is the most frequently used

test of cognitive moral development in recent decades . It is designed to activate and

measure the domination of moral justice schemas, which structure moral reasoning and

judgments. The test consists of five moral dilemmas with 12 moral arguments (items)

attached to each. The items are typical representations of Kohlberg's stages of moral

development (stages 2 to 6). The respondent ranks the four most important arguments

connected to each dilemma, which is scored 4, 3, 2, or 1 point(s) depending on whether it is

ranked as the first, second, third, or fourth most important dilemma. These scores are summarized across three indexes of unadjusted raw scores that separate mature and principle-oriented moral justice reasoning (P-score) from rules (MN-score) and self-oriented moral reasoning (PI-score).

The translation of the DIT-2 was done by bilingual translators using a back-translation procedure. In order to accommodate cultural differences, typical American names have been altered to Norwegian ones in all dilemmas, and, in one case (dilemma four), the context was altered in order to create a Norwegian setting. The internal consistency varied from Cronbach's alpha .67 to .71 for the three index scores.

## 2.4.3 The self-importance of moral identity: the SIMI-scale

The SIMI-scale (Aquino & Reed, 2002) was utilized in study 1 to measure the importance of morals in the individual's self-concept. The scale is two-dimensional and consists of 10 items (scored on a Likert scale from 1 = "disagree strongly" to 5 = "agree fully"). Five items measure Symbolization, which is a representation of the public part of the moral self-concept (sample item: "The kinds of books and magazines that I read identify me as having these [moral] characteristics"), while five items measure Internalization, which represents the private part of the moral self-concept (sample item: "Having these [moral] characteristics is an important part of myself"). For the purpose of the present investigation, the measure was translated into Norwegian using a back-translation procedure. For the present sample, the Cronbach's alpha values were .71 and .74 for the Internalization and Symbolization dimensions, respectively.

## 2.4.4 Subjective level of sleep deprivation: Stanford sleepiness scale

The Stanford Sleepiness Scale (SSS) is a one-item scale, where participants are instructed to rate their current degree of sleepiness on a seven-point scale ranging from 1 ("feeling active, vital, alert or wide awake" to 7 ("no longer fighting sleep, sleep onset soon, having dreamlike thoughts"). Higher scores indicate greater sleepiness (Hoddes, Zarcone, Smythe, Phillips, & Dement, 1973). The scale is widely used as a state measure of subjective sleepiness and it has consistently been shown to be sensitive to acute sleep deprivation (Mitler, Carskadon, & Hirshkowitz, 2000).

## 2.4.5 Moral justice behavior

Moral justice behavior, which was labeled ethical justice behavior in study 3, was measured during a mentally and physically challenging POW exercise. Here, a moral justice imperative was to withhold classified military information and to reveal no information other than name, rank, date of birth, and military number (in accordance with the third Geneva-convention), in order to prevent the enemy taking advantage of such information in their war efforts. The moral behavior in terms of information disclosure was judged by a team of expert interrogators, and cadet performance was rated by their interrogator immediately after each session. This produced an accumulated index of information disclosure from 0 (i.e. the cadet disclosed no information other than name, rank, date of birth, or military number) or higher depending on how much information the cadet had disclosed during the interviews. The information disclosure index was composed of the two factors (a) "verbal disclosure" (e.g., the cadet verbally revealed classified information such as "We have deployed two frigates in position XXX") and (b) "non-verbal disclosure" (e.g., cadets revealed information by pointing at maps or writing down names and addresses, etc.). The total number of

information disclosures over the four interrogation sessions was then added together to produce a summary score based on verbal and non-verbal disclosure of information. The summary score for each cadet was then used as an index of moral justice behavior.

# 3. Results

### 3.1.1 Paper 1: Do activation of moral justice schemas and self-importance of moral identity explain effective operational leadership?

The study explored the relationship between individual antecedents of moral behavior and peer ratings of leadership behavior. Activation of moral justice schemas (Rest, et al., 1999) and self-importance of moral identity (Aquino & Reed, 2002) were used as predictor variables, while peer rating of leadership behavior (Bass & Avolio, 1995) was used as the primary outcome measure. The results indicated that activation of the post-conventional moral justice schema and self-importance of moral identity were positively correlated with transactional and transformational leadership behavior, while they were negatively correlated with passive-avoidant leadership behavior. A stepwise hierarchical regression analysis revealed that the predictor variables explained 10-14% of the variance in passive-avoidant, transactional and transformational leader behavior. Furthermore, the predictor variables emerged as significant predictors of the transformational facets of idealized influence (17%), inspirational motivation (12%), and individualized consideration (16%). Finally, the predictor variables also predicted the transactional facet of contingent reward (11%), the passive-avoidant facets of management-by-exception – passive (8%), and laissez faire (9%).

### 3.1.2 Paper 2: How does sleep deprivation influence activation of moral justice schemas?

The study explored the impact of long-term partial sleep deprivation on the activation of moral justice schemas, which are suggested to play a prominent role in moral reasoning and

behavior. Participants judged five dilemmas in rested and partially sleep-deprived condition.
The results showed that activation of the post-conventional justice schema, indicative of
mature and morally-oriented judgments, was severely impaired during partial sleep
deprivation compared to the rested state. At the same time, the officers became substantially
more rules-oriented (e.g. increased activation of the maintaining norms schema) in the sleep-
deprived condition, while self-oriented moral cognition (e.g. activation of the personal
interests schema) did not change. Interaction effects showed that those officers who
displayed high levels of mature moral reasoning ($n = 24$) in the rested condition, lost much
of this capacity during sleep deprivation in favor of a strong increase in rules-oriented moral
reasoning as well as self-orientation. Conversely, officers at low levels of mature moral
reasoning in rested condition ($n = 23$) were unaffected by sleep deprivation in terms of moral
justice schema activation. In sum, the data showed that long-term partial sleep deprivation
has a strong impact on the activation of moral justice schemas, and consequently on the
ability to make moral justice judgments.

### 3.1.3 Paper 3: Does effective operational leadership predict moral justice behavior in a situation of high moral intensity and temptation?

The study explored the relationship between moral justice behavior in a context of
temptation (e.g. to pursue self-interest at the expense of others) and high moral intensity, and
leadership behavior. Peer ratings of leadership behavior were used as predictor variables,
while ethical justice behavior defined as the disclosure of sensitive information to hostile
forces in a demanding prisoner of war exercise was used as an outcome measure. A
hierarchical regression analysis revealed that transactional leadership explained 19% of the
variance in ethical justice behavior, while transformational leadership did not augment this
effect. However, in a model including all facets of the Full Range of Leadership Model, 25%

of the variance in leaders' ethical justice behavior was accounted for, with high scores on the transformational facet of Intellectual Stimulation ($\beta = -.45$, $p < .05$), and low scores on Individual Consideration ($\beta = .44$, $p < .05$) combined with high scores on the transactional facet Contingent Reward ($\beta = -.68$, $p < .01$) as significant predictors. The results indicate that a strong component of ethical justice behavior is embedded in both transactional and transformational leadership.

# 4.  Discussion

The main objective of the present thesis is to investigate the relationship between effective operational leadership and morals, and the influence of the operational context on morals. While the specific findings of each paper are discussed in the papers, this section will focus on the main findings, implications, limitations and future directions.

## 4.1 Do activation of moral justice schemas and self-importance of moral identity explain effective operational leadership (aim 1)?

TL and TRK are suggested to be a morally based leadership practice (Bass & Riggio, 2006). To link morals to TL and the FRLM, we initially investigated the role of activation of moral justice schemas and self-importance of moral identity. The results confirmed our hypotheses, showing that these antecedents of moral behavior, combined, explained between 12 and 17% of variance in leadership behavior. The results also showed a negative relation between morals and variance in passive and avoidant leadership (PAV).

Our findings are consistent with previous studies showing that activation of mature and principle-oriented moral justice schema is related to TL (Turner, et al., 2002). However, our study is the first conducted in a military context. It indicates that the ability to utilize a moral point of view (Gibbs, 2004), which encompasses the rights and duties of a broad spectrum of stakeholders, and frequent utilization of this perspective is an important competency in military operational TL and TRK. This impact of a principled justice perspective is noteworthy, given that such a moral point of view may represent a leadership

style in which even the enemy and strangers outside the relevant in-group are given consideration (Gibbs, 2004; Rest, 1979), possibly at the expense of the group's more selfish motives. This is further supported by findings that high self-importance of moral identity is related to an expansive circle of moral regard (e.g. including strangers and out-groups) and lower tolerance of collateral damage (e.g. civilians killed in "enemy territory") and punitive killing in military operations (Reed & Aquino, 2003).

Notably, the results show that officers' self-importance of moral identity augments the effect of moral justice schema activation in explaining leadership behavior. This may partially support Rest's (1986) claim of a four-component model of moral behavior, which suggests that moral judgments need to be supported by a motivational and emotion-loaded factor in order to be transformed into behavior. Given previous findings of a moderate relation between activation of justice schemas and moral behavior (Blasi, 1980), the augmentation effect of moral identity strengthens our expectancy that TL and TRK encompass actual moral behavior, and are not merely antecedents or latent variables of such behavior. This augmentation effect further underscores the importance of including several antecedents of moral behavior in future investigations of moral leadership. Here, the role of leaders' ability to recognize moral challenges in complex situations (e.g. moral sensitivity) and their ability to implement moral decisions through cooperation could be fruitful avenues for future research (Bass & Bass, 2008; Rest & Narvaez, 1994).

Furthermore, to our knowledge, this study is the first to investigate the impact of self-importance of moral identity on military operational leadership. One could claim that the moral identity variable is a representation of the relative strength of moral conscience and motivation (Aquino & Reed, 2002; Hardy, 2006). Thus, the positive relation found in the present study indicates that effective military operational leadership encompasses moral

values and a motivation to prioritize moral values over others. Such value prioritizing supports the claims that TL and FRLM are leadership driven by moral values (Bass & Bass, 2008; Burns, 1978, 2004). It is also noteworthy that the study indicates a negative relation between avoidant leadership and morals. This could be seen as partial support for Skogstad et al.'s (2007) identification of PAV, not as a somewhat "neutral" leadership behavior, but as a destructive leadership style that leaves moral challenges unattended.

Finally, in contrast to the PCS, the law and rules-oriented MNS schema did not explain any variance in leadership behavior. This indicates that stereotypical rules-oriented military leaders who stick to orders and regulations and rarely make independent judgments and decisions are less effective in terms of TL and TRK. Given that PCS represents the ability to make mature and autonomous moral judgments (McCauley, et al., 2006), these findings may indicate that military units have a high regard for agile leaders who are able to adapt to a complex and dynamic environment, possibly at the expense of orders and rules, in order to maintain moral standards. Here, it should be noted that the DIT-2 test (Rest, et al., 1999) is a recognition-based test that, in contrast to an interview-based test, activates tacit knowledge structures as well as explicit knowledge (Narvaez & Bock, 2002; Rest, et al., 1999). In addition to analytical decision-making, this may indicate that the indexes are also relevant representations of naturalistic and intuitive decision-making, which is frequently utilized during military operations (Collyer & Malecki, 1998). However, studies of operational leadership that include intuitive moral decision-making in naturalistic settings would be an interesting avenue to follow in future research, given various studies indicating that intuition and emotions play an important part in "real life" moral decisions and behavior (Haidt, 2001; Krebs & Denton, 2005).

To conclude, our findings in study 1 support the claim of a positive relationship between morals and TL and TRK, also in a military context, and a negative relationship with PAV.

## 4.2 How does sleep deprivation influence activation of moral justice schemas (aim 2)?

Even though many studies have shown that context can influence moral judgment and behavior (Zimbardo, 2007), little research has been done to measure the effect of contextual influences on military officers' moral capacities, and, consequently, their ability to meet moral requirements as operational leaders. Sleep deprivation has been shown to cause impairment of cognitive functioning as well as behavior in a variety of tasks and contexts (Blagrove & Akehurst, 2001; Harrison & Horne, 2000). We investigated the impact of partial sleep deprivation on moral cognition in terms of activation of moral justice schemas. Given the expected high prevalence of sleep deprivation during military operation (Fick, 2006; Haslam & Abraham, 1987), we expected this to be a relevant research approach.

The results revealed that sleep deprivation generally causes impairment of activation of the mature and principle-oriented moral justice schema (PCS) to the benefit of a substantial increase in rules-orientation (MNS). The study thus supports Killgore et al.'s (2007) finding that sleep loss affects moral judgments. The results indicate a reduced ability to judge difficult moral situations from a principled point of view, which, in an unpredictable and complex context, may cause leaders to fail to adjust moral judgments and behavior to current moral challenges. Thus, these fluid contexts may encompass unique dilemmas and challenges that are not catered for by the established rules and regulations. It also follows from our findings in study 1 that such impairment of PCS activation and increase in MNS

activation during sleep loss may cause general shortcomings in effective operational leadership. Given the frequent loss of sleep and the multitude of moral challenges involved in such operations, these results point to a serious challenge in terms of maintaining effective functioning as operational leaders in prolonged operations.

The study further showed that those officers who had the highest activation of the mature principled justice schema (PCS) in rested condition experienced a very strong impairment of this capacity during sleep loss and declined from mature judgments into a level of cognitive moral development usually found in junior high samples (Rest & Narvaez, 1994). Seen from an operational leadership perspective, this decline is particularly notable, given that those officers who display high levels of cognitive moral development in rested condition are usually found among the higher ranks and consequently have greater responsibilities during operations (Bass & Bass, 2008; Olsen, 2004). This calls for particular measures in relation to rest in order to maintain these officers' activation of moral justice schemas.

Furthermore, previous research indicates that training during sleep loss may not improve the capacity to solve similar tasks in sleep-deprived condition in the future (Webb & Levy, 1984; Wilkinson, 1961). This may mean that the ability to make mature moral judgments during sleep loss is hard to improve by training in sleep-deprived condition. By showing the strong impairment of activation of PCS in sleep-deprived condition, the results further indicate that a positive development of officers' moral reasoning capacity in rested condition may have little relevance during sleep deprivation (e.g. improvement in rested condition may be neutralized during sleep loss). In order to meet this challenge, it could be argued that the leaders' self-insight and ability to recognize these limitations and impairments before they cause moral transgressions is of paramount importance. This may

also call for a team-based leadership involving team members' monitoring each others' decision-making, and the establishment of routines that enables rest and recovery. It further underscores the importance of relevant and well perceived rules of engagement in military operations in order to support moral judgments that are more focused on rules and regulations during sleep loss.

From a research perspective, the relatively strong effect of sleep deprivation on individual antecedents of moral behavior calls for a further emphasis on contextual influences in studies of morals and operational leadership (Brown & Treviño, 2006; Zimbardo, 2007). The present study also indicates that there may be large differences between requirements of peacetime management and those of operational leadership in war and crisis contexts. This may have several implications. For example, it could be that the effect of sleep deprivation should be a selection criterion when assigning leaders to challenging operational missions and that development of leaders' self-insight related to the effects of sleep deprivation on moral judgments should be increased by targeted training and feedback.

To conclude, our findings show that leaders' ability to make mature and principled moral judgments is severely impaired during sleep deprivation, while their utilization of rules-oriented moral judgments increases. These changes may have implications for their ability to lead effectively.

## 4.3 Does effective operational leadership predict moral behavior in a situation of high moral intensity and temptation (aim 3)?

Transformational leaders have been portrayed as both morally and immorally-oriented (Bass & Steidlmeier, 1999). In order to control for leaders' possible moral manipulation by pretending to be morally committed while at the same time being self-serving at the expense of the common good when moral talk is put into practice (e.g. pseudo-TL; Bass, 1998), we studied the behavior of officer cadets during a realistic and challenging POW situation. The context involved clear moral norms and negative consequences for the common good in cases of moral transgression, in line with a high moral intensity situation. The situation further included strong temptations to compromise on moral obligations to the benefit of personal welfare. The results showed that those officer cadets who were evaluated by their peers as being more transformational, as well as more transactional, behaved more morally by disclosing less information to the enemy then the other cadets. This supports the claim that TL and TRK are positively related to moral practice (Bass & Bass, 2008; Bass & Steidlmeier, 1999).

It should be noted that the POW situation involved social isolation. Such isolation may be a particularly suitable setting for investigations of moral character. Given that no followers or peers could observe the behavior, the likeliness of impression management and "moral acting" is expected to be reduced. In this way, the study provides empirical support for Perry and Proctor-Thomson's (2002) finding that TL and TRK are related to behavioral integrity. It further supports Simons' (1999) emphasis on the importance of leaders who walk the talk of morals in order to gain respect and influence. However, a limitation of the study is that it does not identify intervening variables that mediate or moderate leadership

and morals. On the basis of previous studies, it is likely that the relation is mediated through factors such as trust and commitment (Greenberg & Colquitt, 2005), which stimulate cooperation (Krebs & Denton, 2005). However, further studies should focus on various pathways explaining the relationship between leadership, morals and organizational outcomes (Brown & Treviño, 2006).

A strong feature of the present study is that it investigates actual behavior under stress and not just followers' perception of such behavior. Thus, it is possible that even immorally-oriented transformational leaders are perceived as moral role models by their followers and peers, which means that such perceptions are inaccurate representations of leaders' integrity. However, in line with Krebs & Denton (1997), it could be claimed that it is the perceptions that are the most relevant subject of investigation, given that they are the basis defining reality and, consequently, the motivation and behavior of followers. On the other hand, given the severe negative consequences related to pseudo TL (Bass & Riggio, 2006; Bass & Steidlmeier, 1999), it could be argued that research should put stronger emphasis on behavioral studies of leaders in various situations.

Notably, in the present study, TRK explained the majority of variance in moral behavior, while TL just added some explanatory power. This underscores that the previously suggested distinction between a morally-oriented TL in contrast to a more amoral TRK seems less relevant (Burns, 1978; Kuhnert & Lewis, 1987). It further supports Walker's (Walker, 2006) emphasis on TRK as a prerequisite in the process of establishing and maintaining moral practices. However, the strong impact of TRK in the present study may be due to the rather static nature of the moral imperatives embedded in the POW situation. It is possible that TRK involves the establishment and maintenance of static moral rules, such as the obligation not to disclose information during captivity, while TL represents a more

dynamic approach enabling situational adaptation outside established agreements. Thus, it is possible that a more fluid and low moral intensity context, often found in military operations, involving moral imperatives that are less clear and more difficult to perceive, would require a more autonomous moral orientation in line with TL. However, it should be noted that the unique contribution of TL to predicting moral behavior could have been attenuated due to excessive colinearity ($r = .79$) between TL and TRK. On this basis, a future investigation should address whether and how TL and TRK relate differently in various contexts, for example in a low moral intensity situation.

To conclude, the results from study 3 support the claim that TL and TRK are positively related to moral behavior (Bass & Steidlmeier, 1999).

## 4.4 Why is there a strong relationship between morals and military operational leadership?

The results indicate that followers are sensitive to leaders' moral judgments, moral motivation and behavior when engaging in a leader-follower relationship. In particular, we find that the ability to meet justice requirements in the face of temptation and stress is valued as an important leader competency in military settings. But why do we find this emphasis on morals in a military operational leadership setting?

One possibility is that the justice requirement of "everyone taking their part of the hardship" (Greenberg & Colquitt, 2005) is perceived as a prerequisite for surviving complex and high risk "in extremis" military operations. In other words, it could be claimed that cooperation is what keeps people alive and enables successful task performance (Creveld, 1982; C. Richards, 2004). On this basis, it is likely that people in military units are

particularly sensitive to their leaders' and team members' moral character (Krebs & Denton, 2005). This was demonstrated by Shay's (1995, 2002) identification of injustice as an important explanation for the breakdown of cohesion and military operational leadership during the Vietnam War. Leaders' failure to lead fairly was found to create an atmosphere of distrust, loss of meaning and hate, which consequently distorted the fighting power of US troops.

Furthermore, according to Baumeister, Bratslavsky, Finkenauer, and Vohs (2001), there is an evolutionary mechanism that means that bad impressions and bad stereotypes are quicker to form and more resistant to disconfirmation than good ones. Accordingly, negative information is about five times more emphasized and thoroughly processed than positive information. This may mean that a crew's negative perception of a leader's justice capacity and moral character may cause strong negative reactions. Signs of self-serving leadership at the expense of others may be punished hard in terms of distrust and more active resistance. On this basis, it would be interesting to investigate in future research whether the relationship between morals and effective leadership is universal, or whether it varies with the context. For example, does a military operational context value morals in a different way than a commercial organization on the free market?

In sum, the abovementioned arguments may explain why we find a clear relationship between operational leadership and morals in a military operational context.

## 4.5 Morals are "hidden" in the full range of leadership and in the facets of leadership

Previous studies of morals and leadership have a tendency to limit their investigations to either TL at the expense of TRK and PAV (Khoo & Burch, 2008) and/or global indexes at the expense of facets (Pillai, Schriesheim, & Williams, 1999; Turner, et al., 2002). However, the present study shows that investigations of moral leadership should include facets of leader behavior, given that the moral substance of the facets is found to vary within one global index. For example, TL and TRK facets combined explained more variance in moral justice behavior than the global indexes. This claim is further supported by our finding that the two facets of TL contribute in opposite ways to moral justice behaviour (e.g. intellectual stimulation vs. individual consideration). Moreover, by showing an augmentation relationship between TL and TRK in relation to justice behavior (Waldman, et al., 1990), the results indicate that the whole FRLM should be included in an investigation of moral leadership.

## 4.6 Practical implications of the findings

There are several practical implications of the finding of this thesis. First of all, given previous findings that TL and FRLM represent an effective military operational leadership (Bass, 1998; Bass, et al., 2003), and the present thesis's findings of a clear morals component embedded in TL and FRLM, the FRLM leadership concept stands out as a relevant operationalization of good military operational leadership. This means that leadership development could utilize this concept of leadership in defining educational aims, as well as measures of actual leadership competency and development. Furthermore, this

study also identifies antecedents of moral behavior that could be utilized as aims in military leadership development. By focusing on moral identity as well as activation of justice schemas one could stimulate both the leaders' ability to handle challenging moral dilemmas and strengthen their leadership capacity. Moreover, by showing the importance of moral justice behavior, the study underlines the importance of selecting leaders of high moral character for challenging operational missions. This finding also underscores the importance of maintaining moral standards in operational leadership in order to maintain inspiring and effective leadership.

Finally, the arguably most interesting finding of this thesis is the strong negative effect of sleep deprivation on the ability to activate mature moral justice schema. This means that, in order to maintain the capacity to make good moral judgments, procedures for resting officers during operations should be given consideration. These results also remind us of the detrimental effects that stress and hardship have on human functioning. This should be kept in mind in situations were operational leadership is scrutinized and leaders are put on trial for moral misconduct and failures during operations (Zimbardo, 2007).

## 4.7 Potential limitations and weaknesses

### 4.7.1 General weaknesses in transformational leadership theory

Several weaknesses have been emphasized in relation to TL theory. According to Yukl (2010), the conceptual weaknesses include ambiguous constructs, insufficient description of explanatory processes, a narrow focus on dyadic processes, omission of relevant factors, insufficient specification of limiting conditions (situational variables), and a bias towards

heroic leadership conceptions (Bass & Bass, 2008). Moreover, lack of empirical support for the hypothesized factor structure of the model and too strong relationships among the leadership components have been pointed out as weaknesses (Pillai, et al., 1999). In particular, the transactional factor of contingent reward has, both empirically and conceptually, been shown to lean towards TL. This may stem from the claim that contingent reward is partly transformational since it includes psychological reward and is intrinsically valued by the follower (Bass & Bass, 2008). However, Judge and Piccolo (2004) report an overall validity of .44 for TL, .39 for contingent reward, and -.37 for laissez-faire, while management-by-exception (passive and active) was inconsistently related to the criteria.

## 4.7.2 Measurements issues

Several limitations of field and survey research of this type should be noted. First of all, halo effects and common variance are frequent response biases in such leadership research (Avolio, Yammarino, & Bass, 1991; Hetland, 2004). In ratings of leadership behavior by leaders who have a reputation for being effective, stereotyping and attribution biases are a problem in using questionnaires. For example, as noted by Hetland (2004), a general impression halo effect, which means that a rater's overall impression of the leader causes the rater to evaluate all aspects of performance in accordance with this general impression, may influence the findings. Moreover, the internal consistency of the MLQ facets in the studies was generally lower than expected ($\alpha \geq .54$). However, given that previous studies have shown better consistency (Eid, et al., 2004), this may be the result of test fatigue, due to the generally high test exposure of this category of respondents.

Furthermore, we extracted the "P-score" to index activation of the mature PCS justice schema from the DIT-2, due to the frequent use of the index in previous studies (Rest,

et al., 1999; Turner, et al., 2002). However, the "U-score" represents an alternative and possibly better index in terms of validity. This index encompasses consistency between moral choices and the reasoning behind them. Notably, the U-score is found to be a moderator that enhances the correlation of the P-score with various measures of moral behavior (Bass & Bass, 2008). For example, Mudrack (2002) found that negative correlations of the P-score, U-score and Machiavellianism were only high when high U-scores were added to P-scores in a regression analysis.

Furthermore, the objective outcome criteria of moral justice behavior, which encompassed all information disclosed by the officers as POWs, could be seen as too broad. Here, the interrogators included all types of information, whether militarily sensitive or of a more superficial nature. A more nuanced outcome measure may differentiate between sensitive information that will have serious negative consequences and other information of less relevance to the enemy.

### 4.7.3  Validity concerns of the DIT – 2 measure

Krebs & Denton (2005) question whether hypothetical moral dilemmas, as formulated and measured by Kohlberg's moral judgments interview (Colby & Kohlberg, 1987), are valid predictors of naturalistic moral decision-making and subsequent behavior. This critique may partially apply to the DIT-2 test as well. The DIT -2, however, is a recognition-based test that is expected to activate implicit as well as explicit cognitive processing (Narvaez & Bock, 2002), in contrast to Kohlberg's interview-based testing. In this way, the P-score could be expected to also have relevance to naturalistic decision-making (Collyer & Malecki, 1998; Rest, et al., 1999). Nevertheless, following Krebs and Denton (2005), it could be claimed that such armchair dilemmas do not entail real situations and social

interactions in which real persons react to your choices (often emotionally). In addition,

Krebs and Denton see the lack of encompassing emotions as a weakness of Kohlberg's

theory on cognitive moral development, which waters down the theory's explanatory power.

# 5. Conclusions

As illustrated in the research model (see fig 1, p. 14), the present thesis endeavored to obtain knowledge about *whether* leadership in terms of transformational leadership – and the Full Range of Leadership Model encompasses morals in a military operational context, and how such a leadership context may influence morals.

All in all, the present research suggests that morals are an important part of effective operational leadership. The results show that leaders' ability to act morally in the face of temptation and not violate moral justice obligations at the expense of others is valued by followers as an important aspect of good operational leadership. This also indicates that, utilized in an operational context, the MLQ – 45 measure is sensitive to morals and is consequently a useful tool for identifying morally-oriented leaders. By showing that both antecedents of moral behavior (study 1) and moral behavior (study 3) are positively associated with effective leadership, the thesis does not provide any support for the claim that effective leadership is the result of manipulation, power tactics and immorality (Bailey, 1988; Krantz, 2006; Ledeen, 1999).

Lastly, the thesis shows that activation of the most mature and principle-oriented justice schema, which was found to represent an important part of effective operational leadership (study 1), was strongly impaired during sleep loss to the benefit of a strong increase in rules orientation. Given the expected high prevalence of sleep loss experienced by leaders in military operations (Haslam & Abraham, 1987), this exemplifies the strong negative effect that a military operational context may have on moral conduct and leadership.

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