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ABSTRACT

Since the turn of the millennium, a growing academic interest has emerged regarding the dark side of leadership, both in general and specific contexts. Characteristics of military organisations may either reduce or exaggerate the prevalence and impact of destructive leadership. It is therefore pertinent to explore antecedents and outcomes of destructive leadership in the military context as compared to other settings. Here, we systematically reviewed the current literature and performed a meta-analysis of destructive forms of leadership in a military context. The reviewed studies ($K = 27$) primarily employed context-free instruments, applied cross-sectional designs, and examined outcomes of destructive leadership. Both active (e.g., abusive supervision) and passive (e.g., laissez-faire) forms of destructive leadership were examined in the meta-analysis ($K = 22$, $N = 10,716$). The mean correlation to performance, attitude, health, and well-being was −.29 for active destructive leadership, −.29 for passive forms of destructive leadership and, in comparison, .32 for constructive and effective forms of leadership. Our findings demonstrate that passive and active forms of destructive leadership in a military context may contribute equally to detrimental outcomes, and that successful strategies to prevent and handle consequences of destructive leadership must address both forms of unwanted leadership behaviour.

Research in the field of leadership has traditionally been dedicated to the study of leadership styles and practises that increase effectiveness and productivity as well as employee motivation, commitment and well-being, among other factors (Day, Fleenor, Atwater, Sturm, & McKee, 2014; Yukl, 2013). However, since the early 1990´s, and especially since the turn of the millennium, an interest has emerged in exploring the potential negative and destructive aspects of leadership behaviour and practises (Mackey, Frieder, Brees, & Martinko, 2017; Schyns & Schilling, 2013; Tepper, 2007; Tepper, Simon, & Park, 2017; US Army, 2012; Zhang & Liao, 2015). The potential negative outcomes of destructive leadership behaviour are documented as severe and have been found to exert detrimental effects at both the organisational and individual levels (Mackey et al., 2017; Schyns & Schilling, 2013; Skogstad, Nielsen, & Einarsen, 2017; Zhang & Liao, 2015). Impacts of destructive leadership also extend to the general society, including reduced performance, accidents and expulsion from working life (Tepper, 2007).

While most research to date has been conducted in private and public non-military organisations, a growing interest in the dark side of leadership within military contexts has also developed (Fors Brandebo, Nilsson, & Larsson, 2016; Gallus, Walsh, van Driel, Gouge, & Antolic, 2013). Several recent general reviews and meta-analyses of abusive supervision and other forms of destructive leadership have stressed the importance of examining such leadership practises in the military. Tepper (2007) emphasised the importance of examining the

particular vulnerability of specific industries to the occurrence of abusive behaviour, using the military as an example of a type of organisation that seems particularly susceptible to abusive behaviour due to its hierarchy, need for strict socialisation and required adherence to rules among officers and soldiers. Martinko, Harvey, Brees, and Mackey (2013) stated that the lack of studies in the military is unfortunate because "research could help to identify segments of society where an understanding of abuse is most needed" (p. 125). Likewise, Mackey et al. (2017), in their meta-analysis of abusive supervision, stressed that industries like the military may be particularly likely to experience supervisory abuse and general mistreatment. This underlines the importance of a sharpened focus on the subject in a military context, both for its own worth and to assess the relative status of knowledge in various organisations and sectors of working life.

There is reason to assume that destructive forms of leadership are particularly ripe in the armed forces. The high risks and costs associated with failure in both military training and operations, including the risk of loss of life, may drive leaders to engage in more assertive and aggressive behaviour to ensure effectiveness, sometimes crossing the line into destructive leadership practises. However, high risks and costs may also result in leaders being overwhelmed, passive and avoidant, as in laissez-faire leadership, with detrimental implications for safety and assignments (e.g., Kelloway, Mullen, & Francis, 2006). Internal reports and surveys in military organisations document

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a relatively high prevalence of unwanted destructive leadership behaviour (Reed, 2015), and an increasing number of scientific studies have started to illuminate the extent and outcomes of different forms of destructive leadership in military organisations (e.g. Fors Brandebo et al., 2016).

Moreover, several characteristics of military organisations have the potential to influence the impact of destructive leadership. It is therefore pertinent to ask if the effect sizes for the relationship between destructive leadership and relevant outcomes in the military context is different from that of other settings. On one hand, soldiers and officers are socialised within a strict hierarchy and regimented environment and, thus may be less sensitive to behaviour that could be problematic to civilian employees (Reed, 2015). Moreover, the high prevalence of destructive leadership may shift expectations of what is considered normal, so that personnel do not react negatively to a leader´s behaviour that could be perceived as destructive in another setting (Thoroughgood, Tate, Sawyer, & Jacobs, 2012). Additionally, military personnel have often been subject to an extensive selection process, including criteria such as hardiness, resilience and robustness (Bartone, Eid, Johnsen, Laberg, & Snook, 2009; Maddi, 2007) which may buffer the negative effects of destructive leadership. On the other hand, the focus on leadership and its development in military schools provides a common understanding of what good leadership is. Along with a strong professional identity and pride in the profession, this reinforces the breach of trust experienced by destructive leadership and may even strengthen its detrimental effects (Reed, 2015). Trust in leadership is essential in military contexts because personnel are expected to give up their right to self-determination and follow orders. This need for confidence is in stark contrast to the effects of destructive leadership that include a lack of trust and willingness to follow the leader (Fors Brandebo et al., 2016). Furthermore, an order-based system in which punishment is the consequence for not following instructions, means that one can be locked into a negative situation over time, thus leading to stronger and more harmful effects. This contrariety related to possible outcomes of destructive leadership is reflected in the inconsistent empirical findings among the military population with effect sizes being weak in some cases (mean $r \leq -.15$) (e.g. Hannah et al., 2013; McGurk et al., 2014) and strong in others (mean $r \geq -.44$) (e.g. Chi & Liang, 2013; Gallus et al., 2013). For example, Reed and Bullis (2009) found a negative relationship between destructive leadership and satisfaction; however, there was a non-significant negative relationship with inclination to remain in service.

Recently, several context-free meta-analyses and reviews have been conducted on destructive forms of leadership (Krasikova, Green, & LeBreton, 2013; Mackey et al., 2017; Schyns & Schilling, 2013; Tepper, 2007; Tepper et al., 2017; Zhang & Bednall, 2015; Zhang & Liao, 2015) and on specific aspects of destructive leadership, such as supervisor aggression (Hershcovis & Barling, 2010) and its health outcomes (Hershcovis, 2011; Montano, Reeske, Franke, & Hüffmeier, 2017), indicating a medium size effect of exposure to destructive leadership practices on health complaints. However, to our knowledge, no systematic review or meta-analysis on aspects of destructive leadership has been conducted within specific industries, like the military. In this study, we first provide a systematic review of the current scientific literature concerning destructive forms of leadership in a military context. Secondly, we conduct a meta-analysis to estimate the mean correlations between active forms (e.g., abusive supervision) and passive forms (e.g., laissez-faire leadership) of destructive leadership behaviour and various correlates, based on studies conducted in a military context. Our findings will expand the current knowledge on destructive leadership in a military context and provide a state-of-the-art overview of the number, nature, and findings of studies conducted thus far. Our study represents a unique contribution to research on the effects of active forms of destructive leadership behaviour in relation to more passive and avoidant forms of leadership behaviour.

Destructive leadership in a military context

The military context is unique and distinct from many other working environments in its right to employ violence on behalf of the state (Reed, 2015), typically in a culture with a strong hierarchy and with exposure to potentially dangerous assignments. As emphasised by Hannah and Sowden (2013), military leadership is distinguished from leadership, in general, not by the leadership practises themselves, but by the context, often characterised by hostility or other physical and emotional extremes and the continuous preparation and training for such situations. This means that military personnel are faced with demanding tasks and environments that require more structure and professionalism than what is needed in many other industrial and professional contexts. Furthermore, the importance of command and control, discipline and clear responsibility is decisive in handling such powerful and lethal capacities. To this end, prosecution of military offenses, such as desertion or failure to obey a legitimate order, has been viewed as necessary to maintain discipline (Reed, 2015). The consequences of poor and inadequate leadership performance in this setting range from damaged equipment to the loss of live among the military´s own personnel and non-combatants, as well as the utmost consequence of losing a war. In this regard, an important aspect to consider is how these potentially destructive leadership behaviours are perceived in considerably varied ways, across different social, cultural, and occupational contexts (Padilla, Hogan, & Kaiser, 2007; Sharma, 2017; Thoroughgood et al., 2012). As an example, leader "abuse" may be perceived very differently in a military operation than in a class-room setting (Thoroughgood et al., 2012), thus having different effects and outcomes. However, the military organisation will also encompasses a wide range of tasks, from administrative to operational, in contexts of peace as well as crisis and war; thus comprising a range of situations that are not particularly different by nature, from those of other organisations

and contexts. Indeed, Wong, Bliese, and McGurk (2003) differentiate between military leadership research that focuses on military samples to test general leadership theories and that which tries to understand the nature of leadership in this particular context.

Theory and hypotheses

Conceptualisation of destructive leadership behaviour

A broad variety of terms has been used to refer to the phenomenon of destructive leadership (Craig & Kaiser, 2013), and researchers have examined a range of partly overlapping constructs including "abusive supervision" (Tepper, 2000, 2007), "petty tyranny" (Ashforth, 1997), "despotic leadership" (De Hoogh & Den Hartog, 2008), "tyrannical leadership" (Hauge, Skogstad, & Einarsen, 2007), "toxic leadership" (Lipman-Blumen, 2006), "supervisory abuse" (Bamberger & Bacharach, 2006) and "destructive leadership" (Einarsen, Aasland, & Skogstad, 2007). Most studies on destructive leadership behaviours have examined abusive supervision (Mackey et al., 2017), which has been defined as a "subordinate´s perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviours, excluding physical contact" (Tepper, 2007, p. 178). A more broad and overarching definition of destructive leadership is provided by Einarsen et al. (2007): "The systematic and repeated behaviour by a leader, supervisor or manager that violates the legitimate interest of the organisation by undermining and/or sabotaging the organisation´s goals, tasks, resources and effectiveness and/or motivation, well-being or job satisfaction of subordinates" (p. 208). This definition includes behaviour towards the individual as well as the organisation, including physical contact. In the military context, national and international doctrines (e.g., NATO) have addressed this issue to a very limited extent thus far, including the definition and measures of destructive leadership behaviours. An exception is the recent leadership doctrines published by the US army that describe negative leadership, including toxic leadership defined as a combination of self-centred attitudes, motivations, and behaviours that have adverse effects on subordinates, the organisation, and mission performance (US Army, 2012). However, within the research field of leadership in the military context, non-contextual definitions like abusive supervision and toxic leadership are most frequently applied (Gallus et al., 2013; Hannah et al., 2013).

Many have opted for the inclusion of passive and avoidant forms of leadership in the concept of destructive leadership practises, viewing it as more than the mere absence of leadership (Barling & Frone, 2017; Hinkin & Schriesheim, 2008; Kelloway, Sivanathan, Francis, & Barling, 2005; Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007). The most studied concept in this respect is laissez-faire leadership defined by Bass and Avolio (2004a, p. 4) as follows: " … the avoidance or absence of leadership and is, by definition, the most inactive – as well as the most ineffective according to almost all research on the style.". Likewise, Hinkin and Schriesheim (2008, p. 1237) define this leadership style as "managers avoiding making decisions, abdicating responsibility, and not using their authority." In other words, they emphasise leaders ´avoidance and neglect in performing expected duties. Whether such passive and avoidant forms of leadership should be considered destructive or merely inadequate and ineffective has been discussed (Craig & Kaiser, 2013; Schyns & Schilling, 2013). Based on the two definitions above, and Bass & Avolio´s (2004b) operational definition of the concept, Skogstad, Hetland, Glasø, and Einarsen (2014) define laissez-faire leadership as a follower-centred, avoidance-based type of leadership; focusing on subordinates` perceived situational need for leadership combined with leaders non-response to such needs. Accordingly, laissez-faire leadership is a non-responsive and avoidant type of leadership in situations where active involvement on behalf of the leader or manager is likely required (Antonakis, Avolio, & Sivasubramaniam, 2003; Hinkin & Schriesheim, 2008). Hence, laissez-faire leaders are not meeting the legitimate expectations of their subordinates (Skogstad et al., 2007), thereby complying with Einarsen et al. (2007) definition of destructive leadership. Furthermore, laissez-faire leadership shares many characteristics with passive forms of aggression, where there is a lack of active response; e.g., physical or verbal behaviour that could prevent harm to the victim (Buss, 1961; Parrott & Giancola, 2007), in our case the subordinate. In this regard, it is important to point out that leader passivity is not negative, per se. In some situations, leader intervention is likely neither necessary nor wanted; e.g., when highly competent followers executing their well-defined work tasks.

There are also convincing empirical arguments for viewing laissez-faire leadership as a destructive form of leadership. A meta-analysis by Judge and Piccolo (2004) showed strong and consistent negative relationships between passive leadership and leader effectiveness and subordinate job satisfaction. Moreover, DeRue, Nahrgang, Wellman, and Humphrey (2011) found that the relative importance of transformational and laissez-faire behaviour for predicting leadership effectiveness was approximately equal, but in opposite direction. In line with this, recent studies in both the general (Buch, Martinsen, & Kuvaas, 2015; Skogstad et al., 2014, 2007; Thoroughgood et al., 2012; Yan, Bligh, & Kohles, 2014) and in military contexts (Fors Brandebo et al., 2016), have treated laissez-faire as a type of destructive leadership. The consistent relationship between passive forms of leadership, like laissez-faire leadership, and undesirable outcomes for both the individual and the organisation, supports its inclusion in the concept of destructive leadership as will be done in the present study.

Finally, active and passive forms of destructive leadership both appear to create the same type of negative emotional response pattern in subordinates. Destructive leadership is one of the most severe social stressors employees encounter at work, when perceiving a supervisor´s act as hostile, offensive, unjust, and illegitimate (Skogstad et al., 2017). In line with the Affective Events Theory (Weiss & Cropanzano, 1996), such leadership behaviour triggers affective response from subordinates, influencing mood, behaviour and performance. The affective response may originate from subordinates´ perception of injustice, initiated by a discrepancy between actual and expected leadership behavior and a belief that the supervisor could and should have behaved in a different way (Klaussner, 2014). The perception of leader injustice may lead to an emotional, cognitive and behavioural response such as withdrawal or revenge (Klaussner, 2014). As individuals tend to respond to negative treatment with negative emotions and subsequent misbehaviour, it has been pointed out that perceptions of

abusive supervision, as well as perceptions of supervisor injustice seems to evolve on the basis of the social exchange theory (Klaussner, 2014; Mackey et al., 2017). In sum, repeated lack of leader support may trigger the same negative emotions by inducing anger, humiliation, and a feeling of rejection, supporting the assumption that reaction patterns to laissez-faire leadership resemble those of active destructive leadership.

Based on current definitions of destructive leadership, as well as theory and empirical findings that show approximately the same level of relationships with outcomes as active forms of destructive leadership, the inclusion of laissez-faire and other forms of passive leadership as a dimension of destructive leadership is supported. In this regard, we use the term *passive destructive leadership* to characterise the omission of adequate and legitimate leadership behaviours, in contrast to *active destructive leadership*, which is characterised by the commission of inadequate and illegitimate leadership behaviours.

Antecedents, outcomes and prevalence of destructive leadership

Antecedents of destructive leadership initially received less attention than the potential outcomes, but this has changed dramatically over the past five years (Tepper et al., 2017; Zhang & Bednall, 2015). Possible antecedents range from micro-level to macro-level factors, such as supervisor personality traits (Eissa & Lester, 2017) and stress caused by climate conditions (Van de Vliert, Matthiesen, Gangsøy, Landro, & Einarsen, 2010) to antecedents in the military context like lack of sleep (Olsen, Pallesen, Torsheim, & Espevik, 2016). In a recent meta-analysis, Zhang and Bednall (2015) categorised antecedents into four main groups: supervisor-related, organization-related and subordinate-related antecedents, in addition to, demographic characteristics of supervisors and subordinates. Several models have been proposed to explain the antecedent conditions associated with destructive leadership behaviours; the Dual Process Model, based on self-regulatory processes (psychological resources) and social cognitive processes (Wang, Sinclair, & Deese, 2010); the Affective Events Theory, in which emotions are central (Weiss & Cropanzano, 1996); and a model proposed by Tepper et al. (2017), suggesting that abusive supervision operates through three sets of mechanisms – social learning, identity threat, and self-regulation impairment.

Destructive leadership behaviour has been related to a range of dramatic outcomes on both the individual and organisational levels for active (Montano et al., 2017; Schilling & Schyns, 2014; Zhang & Liao, 2015) as well as passive forms of destructive leadership behaviour (Borgmann, Rowold, & Bormann, 2016; DeRue et al., 2011; Piccolo et al., 2012; Skogstad et al., 2017), in both general and military contexts (Gallus et al., 2013; Hannah & Sowden, 2013). Such outcomes may be divided into leader-related, job-related, organization-related and follower-related outcomes (Schyns & Schilling, 2013). From a broader perspective, outcomes may be differentiated into leader performance, subordinate well-being and health, and subordinate attitudes and behaviour (Skogstad, 2015). Based on this, Figure 1 proposes a theoretical model, as a guideline for the present study, on how constructive and destructive leadership may be related to different types of outcomes.

The relationship between destructive forms of leadership and its outcomes may be moderated or mediated by different variables such as work gain (Harris, Kacmar, & Zivnuska, 2007), the relationship between leader and followers (Harris, Harvey, & Kacmar, 2011) and autonomy based on the Job Demands-Resources model (Velez & Neves, 2016), or in a military context such as moral courage (Hannah et al., 2013) or team cohesion (Luria, 2008). As pointed out in the literature, such issues have not yet been approached in systematic or in-depth manner by current research (Martinko et al., 2013; Zhang & Bednall, 2015).

Findings on the prevalence of destructive leadership vary depending on how the phenomenon has been conceptualised and measured (Aasland, Skogstad, Notelaers, Nielsen, & Einarsen, 2010; Sharma, 2017; Tepper, 2007). In a representative study from the Norwegian working population 33.5% of the respondents reported exposure to at least one destructive leadership behaviour "quite often", "very often", or "nearly always" during the past six months (Aasland et al., 2010). Studies and reports from the US military indicate an approximately 15–20% prevalence of active forms of destructive leadership (Center for Army Leadership, 2011; Reed, 2015; US Army, 2015).
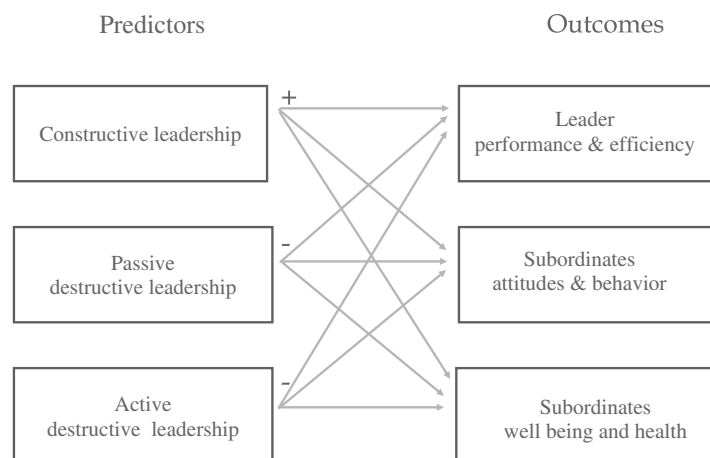

Figure 1. Proposed theoretical model for the relationships between type of leadership and outcomes.

Aim of current study

Based on the existing literature and theoretical assumptions, this study first reviews the current literature regarding destructive leadership behaviour in a military context and provides an overview of the issues investigated, the designs employed and the main findings in this field, including studies that did not meet the criteria for inclusion in the meta-analysis. Secondly, based on the review, the following hypotheses are investigated by conducting a meta-analysis:

Hypothesis 1: Active forms of destructive leadership in a military context are negatively related to leader performance and efficiency and subordinate health-related, attitude-related and behaviour-related variables.

Hypothesis 2: Passive forms of destructive leadership in a military context are negatively related to leader performance and efficiency and subordinate health-related, attitude-related and behaviour-related variables.

Hypothesis 3: Active and passive forms of destructive leadership in a military context have similar negative relationships to predictors and outcomes.

When investigating these hypotheses, we include results from studies that also present findings of "constructive" forms of leadership (e.g. transformational leadership) to examine and compare the actual contribution of destructive forms of leadership on outcomes. In addition, as part of the meta-analysis, we will examine the variation between studies, and explore possible moderators.

Method

This systematic review and meta-analysis was performed in accordance with PRESS methodology (McGowan et al., 2016). A peer review of the search strategy was performed by an independent university librarian to increase the search quality and reduce the risk of selection bias. To assess the quality of evidence for the included studies, a quality evaluation was conducted based on an adapted version of the system for assessing validity in quasi-experimental research (Shadish, Cook, & Campbell, 2003).

Literature search

Several approaches were used to identify relevant studies. First, a systematic literature search was conducted to identify relevant journal articles (McGowan et al., 2016). The primary databases involved were Web of Science, PsycINFO and ProQuest. Additional searches were performed in Oria and Google Scholar. A broad variety of terms are used to refer to the phenomenon of destructive leadership. Officers, students and subject-matter experts were consulted (interviews and seminars) and literature was examined, as suggested in the guidelines by Daniels (2018). A total of 31 different constructs were identified as describing active and passive forms of destructive leadership practices. The initial searches started with these constructs. However, most of these constructs

contained both a term representing the leadership role (e.g., supervisor, boss, chief) and a term representing some expression of a negative quality (e.g., abusive, toxic, destructive). By combining separate groups of leadership search terms and negative quality search terms with a proximity operator, all of the identified concepts were included in the search strategy, in addition to potential variations on these concepts. To further strengthen the search strategy, synonyms were added to these separate search term groups. Finally, a group of different military terms and synonyms (e.g. officer, soldier, combatant) were combined with the results from the search term groups for destructive leadership. Searches were not limited by publication year. The search was completed on 19.12.2017. The complete search strategy may be found in the supplementary material. Secondly, the reference list of more general review articles and meta-analyses of destructive leadership was searched for additional articles (DeRue et al., 2011; Judge & Piccolo, 2004; Mackey et al., 2017; Martinko et al., 2013; Piccolo et al., 2012; Tepper, 2007; Zhang & Bednall, 2015; Zhang & Liao, 2015).

Inclusion and exclusion criteria

In order to be included in the review and meta-analysis, a study had to meet the following criteria: It should: 1) focus on an active and/or passive form of destructive leadership practises and behaviours 2) pertain to a military context; 3) be written in English 4) be published as a peer-reviewed article; and 5) include quantitative data. The articles were assessed based on the title and the abstract, while the full text of seemingly relevant articles was further examined. The search result was exported to Endnote, where duplicates were excluded. The steps undertaken and the results of the search, which yielded a total of 27 articles, are presented in Figure 2.

Coding procedure and inter-rater reliability

The first and last author independently coded all the included studies. Cohen´s κ was calculated to determine the inter-rater reliability for categorical variables. Cohen´s κ for the 27 studies was 1.00 for the following variables: country, type of sample, form of leadership, antecedents, outcomes and categorical mediators. Intraclass correlation coefficients were calculated for continuous variables. The estimated values for the studies included in the meta-analysis were .99 for effect sizes and .95 for sample size N, while the estimated value for the 5 additional studies reviewed was 1.0 for sample size N. Disagreement between the two coders was solved by consensus.

Quality assessment

A standardised quality assessment tool, such as the GRADE system used within the medical field (Guyatt et al., 2011), does not exist for studies of destructive leadership. Selected items from the "JBI Critical Appraisal Checklist for Studies Reporting Prevalence Data" (Munn, Moola, Riitano, & Lisy, 2014) were used in combination with aspects from the validity system of Shadish et al. (2003), covering issues like statistical analyses,
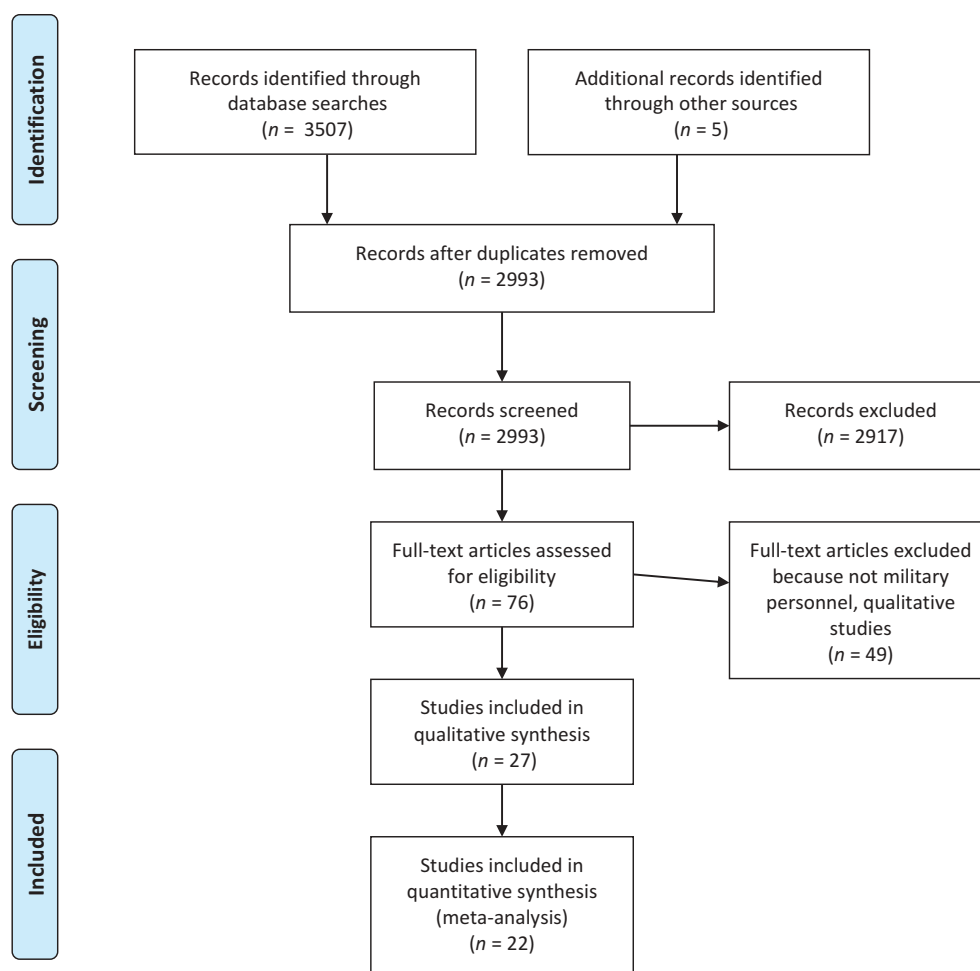
Figure 2. Flowchart of literature search.

measurement instruments, and study design. The rating scale for the individual items was taken from the GRADE system (Guyatt et al., 2011), including the following range: not reported (0), poor (1), satisfactory (2), good (3) and excellent (4). The first author performed the appraisal and consulted with one of the other co-authors. A total of 10 items were assessed for each study, resulting in a possible total score of 40. The influence of quality was then tested as a possible moderator in the meta-analysis. The quality appraisal tool with results can be found in the supplementary material (Table A Checklist and Table B Results).

Meta – analysis calculations

To perform the calculations of the meta-analysis, the Comprehensive Meta-Analysis (CMA) V3 program (Borenstein, Hedges, Higgins, & Rothstein, 2007) was applied. SPSS 25 was used for descriptive analyses. The correlation effect sizes were transformed using the Fishers' Z transformation. The meta-analysis calculations were performed using this index and then converted back to correlations by employing the CMA program (Borenstein, Hedges, Higgins, & Rothstein, 2009). Based on Cohen's terminology (Cohen, 1988), correlations were classified as small (.10), moderate (.30) and large (.50). A Random-Effects Model was used for all meta-analysis

calculations. This model assumes that effect sizes in a population may vary, and that other factors besides sampling error may influence the observed effect sizes, such as type of sample, measurement instrument or study design (Borenstein et al., 2009, p. 74). The mean weighted correlations were calculated using the inverse of the variance components, including both sampling error and variation between studies, resulting in more equal weights between the studies than if they had been calculated using a Fixed Effect Model. In addition to the aforementioned, the correlations corrected for attenuation were also computed. The correlations were individually corrected for measurement error in both predictor and outcome variables according, to the Hunter and Schmidt meta-analysis method (Hunter & Schmidt, 2004). The Metados program was used for calculating the correlations corrected for attenuation (Martinussen & Bjørnstad, 1999). For studies with missing information regarding the reliability of one or both variables, the mean value of other studies was used. The suggested weighting used by (Hunter & Schmidt, 2004) is slightly different from what is used by the CMA program under a Random Effects Model, representing a combination of sample size and a correction factor that lends more weight to larger studies with little correction.

To determine how much of the observed variation could be attributed to sampling error, several analyses were performed.

The Q-statistic was calculated to test the null hypothesis that all studies in the analysis shared a common effect size (Borenstein et al., 2009). A significant result indicates heterogeneity and a need for further examination of moderators. The I^2 statistic was computed to estimate what proportion of the observed variance reflects true differences in effect sizes rather than sampling error (Borenstein et al., 2009). The T^2 statistic was used to assess the variance of true effect sizes in Fisher´s Z unit. The 95% prediction interval indicates the range in which the true correlation of any single population falls within a 95% probability (Borenstein et al., 2009). To ensure that the mean effect sizes calculated in the meta-analysis were based on independent samples, multiple correlations for the same predictor-outcome relationship (per sample) were combined by CMA, before the overall analyses were conducted. To ensure that similar variables were coded in the same direction in all studies before combining them in the meta-analysis, some were adjusted before running the analyses.

Mixed-effect analyses were used for moderator analyses with categorical variables. A significant total between Q-value (Q_B) indicates true differences in the effect sizes of the subgroups (Borenstein et al., 2009). Meta-regression analyses were used for continuous moderators using a random effects model with full maximum likelihood estimation and Knapp-Hartung adjustment, which is recommended for analyses with small sample sizes (Hartung, Knapp, & Sinha, 2008). Moderator variables may influence the mean effect sizes and explain a part of the variance between studies. In the current study, continent (North America, Europe and Asia), place examined (military base, school or deployed), level of rank (high, middle or low) and condition (operational, training or normal duty) were included as categorical moderator variables. Percentage of women in the study and the quality assessment score were examined as continuous moderators, in meta-regression-analyses. Sensitivity analyses were performed by removing studies, one by one, to examine the impact of each study on the overall mean effect size for each outcome (Borenstein et al., 2009). Funnel Plot, Safe N and Duval and Tweedie´s trim and fill procedures were performed to examine publication bias (Borenstein et al., 2009).

Results

Descriptive findings

The literature search identified 27 relevant studies for the review, 22 of which presented effect sizes and could be included in the meta-analysis. Table 1 synthesises the data of all studies included in the review. A total of 14 studies examined active forms of destructive leadership, while 15 studies examined passive forms of destructive leadership and only two studies examined both forms. Studies of active destructive leadership were published between 2002 and 2017, while those of passive destructive leadership were published between 1990 and 2016. A total of 16 studies originated in the US (59%), eight were from Europe (30%) and three from Asia (11%). The studies primarily used cross-sectional design (81%), 24 studies (89%) examined outcomes, 5 studies (19%) examined antecedents,

and 9 studies (33%) examined moderators/mediators, such as cohesion and combat exposure (Table 1).

The various concepts used to describe destructive leadership practices are reflected in the different measurement instruments. As shown in Table 1, several scales have been used to measure active destructive leadership in a military context. The scales used are primarily context-free, including the Supervisor Undermining Scale (Duffy, Ganster, Shaw, Johnson, & Pagon, 2006), the Petty Tyranny in Organisation Scale (Reed & Bullis, 2009), and the Toxic Leadership Scale (Gallus et al., 2013), or a combination of these instruments (Cole & Bedeian, 2007; Zellars, Tepper, & Duffy, 2002)(Table 1). As for studies of the general population (Mackey et al., 2017; Zhang & Liao, 2015), the most frequently used instrument for examining active forms of destructive leadership in military populations is the scale on Abusive Supervision (Tepper, 2000) (29%), see Table 1. The primary instrument found to measure passive forms of destructive leadership was the Multifactor Leadership Questionnaire (87% of the studies, see Table 1), though different versions of it were applied. Three of the studies used the instrument, Destrudo L, which is specifically designed to measure destructive leadership behaviour in the military context and includes both active and passive forms of destructive leadership (Fors Brandebo et al., 2016; Johansen & Platek, 2017; Larsson, Fors Brandebo, & Nilsson, 2012).

Five of the reviewed studies examined antecedents of destructive leadership (Table 1), focusing on considerably different factors and variables. Eid, Helge Johnsen, Bartone, and Nissestad (2008) found that the personality trait hardiness, predicted a lower score on passive avoidant leadership and a higher score on transformational leadership. A study by Olsen, Eid, and Johnsen (2006) found that moral behaviour was related to laissez-faire (9%), indicating that shortcomings in actual and constructive leadership behaviour may stem from a lack of moral competency. A study of naval officers showed that ratings of military performance as a naval academy midshipman were predictive of laissez-faire leadership as an officer four to ten years after graduation (Yammarino, Spangler, & Bass, 1993). Olsen et al. (2016) examined the influence of sleep on leadership behaviour and found that scores on laissez-faire behaviour increased from a rested to a sleep-deprived state, while Johnsen, Eid, Pallesen, Bartone, and Nissestad (2009) found that laissez-faire was associated with poorer military development grades and leadership effectiveness. Hence, destructive leadership appears to be associated with lack of sleep, lack of moral competency, low military competence and leadership effectiveness, in addition to low personality trait scores for hardiness.

A total of 24 of the reviewed articles examined outcomes of passive and/or active forms of destructive leadership (Table 1). Eight of the studies (30%) examined performance (Bass, Avolio, Jung, & Berson, 2003; Bass & Yammarino, 1991; Chou, Sibley, Liu, Lin, & Cheng, 2015; Eid et al., 2008; Taylor, Psotka, & Legree, 2015) and effectiveness (Schiena, Letens, Van Aken, & Farris, 2013; Yammarino & Bass, 1990; Yammarino et al., 1993). Both active and passive forms of leadership were negatively related to scores on performance and effectiveness. Bass and Yammarino (1991) found that subordinate ratings of laissez-faire leadership were

Table 1. Overview of the studies included in the literature review.

Author, year	Country	Description of Sample	N	Study Design	Leadership[b]	Predictors	Scale	Outcomes	Mediators/moderators	Score[c]
Johansen et al., 2017	Norway	Cadets at the Norwegian Defence University College and the Armys leadership dev. program	167	Crossectional	A,	No	Destrudo L	Organisational comittment, work engagement, burnout	No	32
Sadler et al., 2017[a]	US	Army and Air Force. Reserve. National Guard and Active component Servicewomen. US	1330	Crosssectional	A, C	No	Negative leadership behavior/items	Risk of sexual assault	No	23
Fors Brandebo et al., 2016	Estonia, Sweden, Switzerl., Netherl.	Students at National Defence Academies in Estonia, Sweden, Switzerland, Netherland	533	Crosssectional	A, P, C	No	Destrudo L	Propensity to leave, trust, workplace atmosphere, emotional exhaustion,	No	35
Olsen et al., 2016[a]	Norway	Cadets at the Naval Academy, Norway	16	Longitudinal	P, C	Sleep	MLQ	Task performance, intention to leave, occupational commmitment, supervisors identification	No	25
Chou et al., 2015	Taiwan	China Armed Forces. Platoon leaders in Taiwan	1077	Crosssectional	A, C	No	Paternalistic Leadership (PL) Scale		No	28
Taylor et al., 2015	US	US Army. Lieutenants, Captains and Majors Lieutenent Colonels	116	Crossectional	P, C	No	MLX-5X	Leader effectiveness	No	23
McGurk et al., 2014	US	US Army. Soldiers in Iraq and Afghanistan	773	Crossectional	A, C	No	Non-Commissioned Officers Leadership scale	PTSD caseness	Combat exposure	35
Nahum-Shani et al., 2014	US	US Air Force. Deployed. Active duty, the reserve and the Guard	1009	Longitudinal	A, C	No	Supervisor undermining, supervisor support	General health, job strain	Self-Esteem, quality of work life	38
Chi et al, 2013	Taiwan	Ministry of National Defence, Taiwan. Officers	254	Crossectional	A	No	Abusive Supervision	Work Withdrawal, emotional exhaustion	Emotional exhaustion	36
Gallus et al., 2013	US	US military units and service members. In US	2025	Crosssectional	A	No	Toxic Leadership Scale 15	Job satisfaction, unit civility, organizational commitment,	Toxic leadership congruence, unit civility	32
Hannah et al., 2013	US	US army soldiers, national guard, army reserve. In Iraq	1428	Crossectional	A	No	Abusive Supervision	Moral courage, report intention, beeing disiplined, values identification,	Moral courage, identification with org. values	35
Schiena et al., 2013	Belgium	Belgium Armed forces. Commanding officers, leaders of detachment. Crises missions (Afghanistan, Lebanon, Libya)	17	Crossectional	P, C	No	MLQ-5X	Extra effort, effectiveness, satisfaction	No	25
Britt et al., 2012[a]	US	US Armed forces. Active duty soldiers. Afghanistan	951	Longitudinal	A, C	No	The Leadership Scale	Barriers to mental health treatment	No	27
Larsson et al., 2012	Sweden	Swedish Armed Forces. Conscript soldiers, NCO, Officers cadets, Majors	421	Crosssectional	A, P	No	Destrudo L	Lack of motivation/propensity to leave	No	35
Johnsen et al., 2009[a]	Norway	Cadets at the Naval Academy, Norway	71	Crossectional	P, C	Hardi-ness	MLQ-5X	No	No	24
Reed et al., 2009	US	Military Senior Service College. US. Mixed sample. US	168	Crosssectional	A	No	Petty Tyranny in Organisation Scale	Jobb satisfaction levels, inclination to remain in service	No	19
Eid et al., 2008	Norway	Cadets at the Naval Academy, Norway	68	Longitudinal	P, C	Hardi-ness	MLQ-5X	MD grades	No	33
Luria, 2008	Israel	Soldiers in Fighting brigades. Israel	105	Crosssectional	P, C	No	MLQ	Safety climate strength	Cohesian	34
Cole et al., 2007	US	Air Force Materiel Command. US. Company grade officers, field grade officers, enlisted, civilians	780	Crosssectional	P, C	No	MLQ-5X	Work commitment, emotional exhaustion,	Group members consensus	35
Duffy et al., 2006	US	Soldiers. US National Guard	370	Crossectional	A	No	Abusive supervision, supervisors undermining	Trust in supervisor, job involvement, job satisfaction, negative affectivity	Supervisor undermining	31
Olsen et al., 2006	Norway	Cadets. Norwegian Naval Academy	147	Crossectional	P, C	Moral reasoning, moral identity	MLQ-5X	No	No	35
Bass et al., 2003	US	US Army. Light infantry rifle platoon leaders	72	Longitudinal	P, C	No	MLQ-5X	Performance, cohesion, potency	No	37
Zellars et al., 2002	US	Air National guard. National guard members	373	Crossectional – two level	A	No	Abusive supervision, supervisor undermining	OCB, affectivity, procedural justice	Procedural justice and OCB role definitions.	33
Yammarino et al., 1993[a]	US	US Navy officers	186	Longitudinal	P, C	Acad. and mil. performance	MLQ	Satisfaction, effectiveness, early promotion, appraised performance	No	29
Roush et al., 1992	US	US Navy. Midshipman	90	Crosssectional	P, C	No	MOQ (MLQ)	Ekstra effort	No	29
Bass et al., 1991	US	US Naval Academy	115	Crosssectional	P, C	No	MLQ-11	Superior rated performance, early promotion	No	33
Yammarino et al, 1990	US	US Naval Academy, offisers	608	Crossectional	P	No	MLQ-11	Ekstra effort, satisfaction, effectiveness	No	33

Note: [a]Studies not included in the meta-analysis, [b] Forms of leadership; Active Destructive (A), Passive Destructive (P), Constructive (C), [c] Metodological quality score (0–40).

negatively related to superior-rated performance and superior-rated early promotion. Nine studies (33%) examined factors related to subordinate well-being and health (Britt, Wright, & Moore, 2012; Chi & Liang, 2013; Cole & Bedeian, 2007; Fors Brandebo et al., 2016; Johansen & Platek, 2017; Luria, 2008; McGurk et al., 2014; Nahum-Shani, Henderson, Lim, & Vinokur, 2014; Sadler, Mengeling, Booth, O´Shea, & Tomer, 2017). The studies indicated that subordinate reports of laissez-faire leadership behaviour were related to emotional exhaustion (Fors Brandebo et al., 2016 ; Cole & Bedeian, 2007) and PTSD caseness (McGurk et al., 2014) as well as reduced subordinate general health (Nahum-Shani et al., 2014). A total of 16 studies (59%) examined attitudinal and behavioural outcomes among subordinates (Bass et al., 2003; Chi & Liang, 2013; Chou et al., 2015; Cole & Bedeian, 2007; Duffy et al., 2006; Fors Brandebo et al., 2016; Gallus et al., 2013; Hannah et al., 2013; Johansen & Platek, 2017; Larsson et al., 2012; Reed & Bullis, 2009; Roush & Atwater, 1992; Schiena et al., 2013; Yammarino & Bass, 1990; Yammarino et al., 1993; Zellars et al., 2002). As an example, in a study of 2572 military employees, Hannah et al. (2013) found that abusive supervision was negatively related to the moral courage of followers and their identification with the core values of the organisation.

Data synthesis of all studies is detailed in Table 1. 5 of the studies were only included in the review. Briefly, these studies showed that sleep, hardiness trait and military performance may be antecedents to laissez faire leadership (Johnsen et al., 2009; Olsen et al., 2016; Yammarino et al., 1993) and that active forms of destructive leadership were associated with risk for sexual assault, stigma and barriers to seek mental health care (Britt et al., 2012; Sadler et al., 2017). All the studies included measurement of constructive forms of leadership, and the result showed an inverse effect to active and passive forms of destructive forms of leadership. Details of these studies are found Table 1 where they are marked with an a.

Meta-analysis calculations

A total of 22 studies provided information on the association between destructive forms of leadership behaviour including a predictor variable and one or more criterion variables and could thus be included in the meta-analysis (Table 2). The articles were published between 1990 and 2017 ($M = 2008$, $SD = 8.2$). Twelve of the articles included active forms of destructive leadership, 12 addressed passive destructive forms of leadership, and two articles included both types of destructive leadership. Only one of the studies provided information about the association between the predictor and the destructive leadership. Studies that also included variables measuring supposedly constructive forms of leadership were included, and corresponding meta-analysis calculations were conducted (13 studies). The total sample size was 10.716. Most samples were from the USA ($K = 13$), followed by Europe ($K = 7$).

Table 2 presents the mean weighted correlations between predictors, outcomes and all types of leadership. The mean correlation to any variable is −.29 for active destructive leadership, −.29 for passive destructive leadership and −.30 for active and passive destructive leadership combined, showing that both active and passive forms of destructive leadership are negatively related to the examined predictors and outcomes. Hypotheses 1 and 2 were therefore supported. The similar mean correlations of active and passive forms of destructive leadership behaviour also supported hypothesis 3, which stated that they would have a similar negative relationship with the examined variables. The mean correlation with any variables was .32 for measures for constructive and effective forms of leadership. Hence, the relationship of active and passive forms of destructive leadership to outcomes appears to be both equivalent and opposite to that of constructive leadership (−.29 and −.29 vs. .32). The results for the three subgroups of outcome variables (leader performance, subordinate attitude and behaviour and subordinate well-being and health) are also presented in Table 2. The association between destructive leadership (active and passive) and effectiveness had the strongest mean correlation (−.36), while the association between destructive leadership (active and passive) and turnover intention had the weakest mean correlation (−.18) of destructive forms of leadership. For constructive forms of leadership, subordinate attitude and behaviour had the highest mean correlation (.38), while transactional leadership had the lowest mean correlation (.25). The complete list of outcome variables is presented in Table 1. In general, the corrected mean correlations were slightly higher than the uncorrected mean correlations without any correction for measurement error; with −.31 for active destructive leadership, −.32 for passive destructive leadership and −.32 for active and passive destructive leadership combined. Reliability estimates was reported for 76% of the predictor variables and 71% of the outcome variables. The reliability was frequently reported as Cronbach's alpha, varying from .61 to .97 ($M = .85$) for the different measures of leadership and from .67 to .97 for the outcomes ($M = .83$).

The homogeneity test was significant for all main categories of leadership (Table 2), indicating true variation between studies and a need for conducting moderator analyses. Some of the sub-categories had non-significant Q-values indicating that no true variation between studies was detected. Moderator analyses and meta-regression analyses were conducted for outcome variables with significant heterogeneity. Out of the 13 categorical moderator analyses of outcomes of active and passive destructive leadership, none of them were significant (Table 3).

Similar moderator analyses were conducted separately for active and passive destructive leadership with similar and non-significant findings, see supplementary material Table C. Meta-regression analyses were conducted for continuous moderator variables, quality assessment ($K = 17$, $b_1 = 0.01$ $t = 0.80$, $p > 0.5$, R^2analog $= .04$) and percentage male ($K = 17$, $b_1 = 0.01$ $t = 1.2$, $p > 0.05$, R^2analog $= .10$), concluding that none of the moderators explained a significant part of the observed variation in effect sizes.

Sensitivity analysis and indicators of publication bias

Sensitivity analyses estimated a mean effect size by excluding one study at a time. The results were relatively stable for different outcomes for the combination of active and passive destructive leadership, where the estimated mean r varied from −.27 to −.31, depending on which study was removed from the analysis.

Table 2. Meta-analyses results for the relationship between active, passive destructive leadership, constructive leadership and different predictors and outcomes.

Variables	K	N	Mean r	Mean r_cor	95% CI	Q	I^2	PI
Active and Passive destructive	22	10,716	-.30	-.33	-.37 to -.22	372.08***	94.36	-.61 to .10
Leader Performance	7	2,073	-.29	-.27	-.39 to -.17	26.75***	77.57	-.58 to .07
Effectiveness	4	809	-.36	-.45	-.45 to -.26	4.35	31.10	-.63 to -.00
Other	3	1,264	-.19	-.19	-.29 to -.08	3.29	39.11	-.85 to .70
Attitude & Behavior	18	9,644	-.27	-.32	-.37 to -.17	431.21***	96.06	-.64 to .20
Job satisfaction	5	3,188	-.33	-.49	-.50 to -.14	80.60***	95.04	-.80 to .39
Extra effort	3	715	-.19	-.00	-.54 to .21	21.51***	90.70	-.99 to .99
Intention to leave	3	2,031	-.18	-.22	-.26 to -.09	7.52*	73.39	-.84 to .69
Other	13	8,340	-.29	-.33	-.41 to -.16	441.31***	97.28	-.70 to .26
Well being & health	6	3,516	-.30	-.35	-.38 to -.23	27.86***	82.05	-.53 to -.03
Burnout	4	1,734	-.34	-.39	-.41 to -.27	7.19	58.25	-.58 to -.04
Other	2	1,782						
Active destructive	12	8,598	-.29	-.32	-.39 to -.17	330.23***	96.67	-.65 to .18
Leader performance	1	1,077						
Attitude & Behavior	11	7,825	-.28	-.32	-.40 to -.15	360.24***	97.22	-.68 to .25
Well being & health	5	2,736	-.30	-.34	-.39 to -.20	26.91***	85.13	-.60 to .07
Passive destructive	12	3,072	-.29	-.33	-.37 to -.21	48.90***	77.51	-.53 to -.01
Leader performance	6	996	-.33	-.42	-.40 to -.25	6.57	23.93	-.49 to -.15
Attitude & behavior	9	2,773	-.26	-.30	-.37 to -.14	65.72***	87.83	-.59 to .14
Well being & health	2	1,313						
Constructive	13	4,902	.32	.34	24 to .39	72.53***	83.46	.05 to .54
Leader performance	6	1,465	.22	.26	.17 to .27	3.79	0.00	.15 to .29
Attitude & behavior	9	3,830	.38	.39	.28 to .47	68.37***	88.30	.04 to .64
Well being & health	4	3,095	.25	.30	.17 to .32	14.77**	79.68	-.10 to .54
Transformational LS	8	1,405	.33	.41	.28 to.38	3.51	0.00	.27 to .39
Transactional LS	9	1,510	.28	.27	.15 to .40	41.68***	80.81	-.17 to .63

Note. K = number of samples; N = total sample size; 95% CI = 95% confidence interval; Q = test for homogeneity; I^2 = percent of true heterogeneity; PI = prediction interval.
*p < .05, **p < .01,***p < .001. When K < 3 no analyses were conducted.
LS = Leadership.

Table 3. Results of the Categorical Moderator Analyses for the Different Correlations between Destructive Leadership and Different Predictors and Outcomes.

Variable	Q_B	K	N	Mean r	95% CI	Q	I^2
Active and passive							
All outcomes							
Place	1.99						
Military base		16	7579	-.33	-.35 to -.31	278.96***	94.62
Military School		4	936	-.34	-.40 to -.29	8.10*	62.95
Deployed		2	2201	-.12	-.16 to -.08	0.93	0.00
Level	0.73						
Midle		3	954	-.36	-.41 to -.30	8.68*	76.95
Low		15	8478	-.28	-.30 to -.26	349.10***	95.99
Conditions	1.92						
Operational		4	3227	-.17	-.20 to -.13	14.14**	78.78
Training		5	482	-.33	-.41 to -.24	7.77	48.52
Normal duty		13	7007	-.34	-.36 to -.32	271.71***	95.58
Continent	0.74						
North America		13	7927	-.31	-.33 to -.29	312.34***	96.16
Europe		6	1353	-.26	-.31 to -.21	14.18*	64.75
Asia		3	1436	-.22	-.27 to -.17	32.73***	93.89

Note. Q_B = test for subgroup differences (mixed-effect model); K = number of samples; N = total sample size; 95% CI = 95% confidence interval; Q = test for homogeneity; I^2 = percent of true heterogeneity; the results of the moderator analyses were reported for categorical variables with at least two studies. *p < .05, **p < .01, ***p < .001.

The funnel plot, combining the effects of active and passive destructive leadership, showed a relative symmetry in the included studies, thus indicating that the result of the meta-analysis is comparable to the population effect (Sterne et al., 2011). The Duval and Tveedie´s trim and fill method indicated that there were no missing studies to the left or right of the mean, indicating that the impact of potential publication bias is trivial (Borenstein et al., 2009). Rosenthal's Fail Safe N indicated that 4015 unlocated studies are needed in order to make the overall effect size estimate non-significant, while Orwin´s Fail Safe N indicated that 655 missing studies are needed to reduce the estimated mean correlation to −.01.

Discussion

As military organisations have many particular characteristics that may lay the foundation for destructive forms of leadership, we have examined such destructive forms of leadership practises in military settings, whether they be active or passive in nature, by conducting a literature review and meta-analysis

of existing academic studies. In an attempt to cover a more overarching concept of destructive leadership (Einarsen et al., 2007), both active and passive forms of destructive leadership behaviour were addressed. In practise, the term passive destructive leadership often refers to laissez-faire leadership, which is a passive avoidant form of leadership (e.g., Fors Brandebo et al., 2016).

The literature review indicates that relatively few studies have been performed in this field, particularly when it comes to examining prevalence and antecedents, see Table 1. Hence, we know little of how widespread the problem of destructive leadership in the military is and why it occurs. However, it is clear from our findings that destructive leadership in military organisations is related to severe outcome variables, whether they be organisational in nature (e.g., reduced performance, increased turnover) or individual (e.g., employee burnout, negative affectivity). The inconsistent terminology and choice of concepts to address issues of destructive leadership contribute to the difficulty of make comparisons and building knowledge. In terms of research design, studies are primarily cross-sectional, and vary in the degree to which they take into consideration the uniqueness of the military context into regard (Chi & Liang, 2013; Duffy et al., 2006). For example, only three studies used contextual-derived scales. Based on these findings, the academic field of destructive leadership in a military context may be characterised as rather immature and fragmented. At the same time, it must be noted that an increasing number of research articles have been published on military samples in recent years; 14 of the 27 articles were being published between 2012 and end of 2017.

The meta-analysis showed that both active and passive forms of destructive leadership are associated with negative outcomes related to leader performance and subordinate attitude, behaviour, health and well-being. The results also showed that the negative associations between active and passive forms and outcomes are of medium and similar magnitude. Hence, our findings indicate that the potential consequences of active and passive forms of destructive leadership behaviour are of similar severity, in accordance with our hypotheses. Therefor, our findings support the notion that passive forms of leadership, such as laissez-faire leadership, could be considered an integrated element in the concept of destructive leadership (Skogstad et al., 2017). The result seems to be largely consistent with what has been reported in other quantitative reviews of destructive leadership (Mackey et al., 2017; Zhang & Liao, 2015). This may be due to the fact that the majority of studies examined is performed in a military school setting or at a home base, characterised by a more civil context. In the future, more studies of the military population should make it possible to have a more direct comparison on similar variables. In sum, the results from both the review and meta-analyses show that there is evidence to support a negative association between active and passive destructive leadership and the examined antecedents and outcomes.

The negative emotional response to a negative work event is suggested to explain the perception of both active and passive destructive leadership behaviours (Skogstad et al., 2017), negatively influencing subordinates' attitudes and behaviour, as well as well-being and health. In the same way, a leader's performance and goal attainment may be viewed as a function of his/her followers such that, when employees experience destructive leadership behaviour, they may reciprocate the behaviour and reduce their performance (Naseer, Raja, Syed, Donia, & Darr, 2016), which may in turn trigger more destructive behaviours by frustrated leaders. Furthermore, destructive leadership can either influence how the targeted employees rate leader performance or lead to reduce employee performance. In either case, it may lead to reduced performance as a team and corresponding peer ratings that reflect the same. A study of Norwegian restaurants showed that in restaurants where harassment and bullying was ripe, both employees and external evaluators rated the restaurant low in quality and innovativeness (Mathisen, Einarsen, & Mykletun, 2008).

There was a substantial amount of true variance between the studies in the meta-analysis, which was subsequently addressed by conducting moderator analyses. However, none of the moderators examined were found to be significant. This may be explained by low statistical power, as the number of both overall studies and those in subgroups was small. However, the results from these exploratory moderator analyses indicated a difference between the mean correlations of operational settings and ordinary work conditions while operational settings resulted in smaller effect sizes. This difference may be related to strict selection criteria for deployment and the fact that other types of leadership behaviour are tolerated in military operational environments. The impact of operational setting should be further examined as a moderator in future meta-analyses with more studies included.

Strengths and limitations

Our findings should be interpreted in the context of the strengths and limitations of the study. To our knowledge, this review is the first to examine outcomes of both active and passive forms of destructive leadership in the same meta-analysis. The study thus represents a first step to examining the sum of evidence in the field of destructive leadership. A further strength of the current meta-analysis is the inclusion of a control for competing correlated leadership styles related to the outcomes employed. In addition, this study includes both a review and a meta-analysis, which generates a broader and more comprehensive picture of the field.

One limitation is that some of the variables were only examined by a few studies eligible for inclusion. Furthermore, cross-sectional data has inherent limits related to cause and effect relationships and to endogeneity challenges, including common method variance and plausible and actual omitted variables (Antonakis, 2017). These challenges counteract robust estimates of causal relationships that would necessitate an experimental design or the use of instrumental variables (Antonakis, Bendahan, Jacquart, & Lalive, 2010). However, when causality cannot be implied, cross-sectional studies that report the correlation of variables measured at the same time

may reveal relationships that can be causally confirmed in subsequent studies designed for valid causal evidence. Another limitation is that the relatively low number of studies and comparable variables included in the meta-analysis limits the possibility of conducting moderator analyses.

Recommendations for future research

A majority of the studies reviewed in the current study examine military samples from the US, and primarily studying personnel in military academies and military bases (Table 1). Future research should be designed to explore military personnel in operational and deployed settings that capture characteristics unique to the military profession (Wong et al., 2003), as well as examining military personnel from other nations and cultural settings besides the US.

Our review of the current literature shows that research of destructive leadership in a military context can be further developed in terms of methods and designs. Longitudinal and experimental designs are needed to address causality (Mackey et al., 2017). Moreover, new studies on destructive leadership should use registry-data (performance data, sickness absence) and evaluation from others (e.g. 360° leader evaluation), if possible, as these measures provide more valid and objective data and prevent common method bias (Podsakoff, MacKenzie, & Podsakoff, 2003; Podsakoff & Organ, 1986). As studies of destructive leadership in the military context are in an early stage of development, qualitative designs may also be beneficial; e.g., interview studies and focus group designs. Furthermore, there is a need for more studies that combine the assessment of active and passive forms of destructive leadership with the assessment of constructive leadership (e.g. Fors Brandebo et al., 2016), and include the use of measurements that allow for comparisons and accumulation of knowledge. If possible, a research design including several measurements over longer periods should be employed; evaluating antecedents, risk factors and outcomes, and in particular including mediators and moderators to gain a more complete understating of different forms of destructive leadership in this field.

Moreover, current studies primarily use context-free instruments to examine destructive leadership in the military context. This raises the question of the expediency of context-specific versus context-free measurements (Larsson et al., 2012). As the basic principles and definition for leadership in the non-military and military contexts are similar, the use of context-free instruments in military settings would allow for comparisons with civil organisations. On the other hand, the military system is characterised by a special framework, including a strong consciousness of rank, a need to strictly comply with orders and a potentially dangerous environment. Hence, a context-specific instrument might be better suited to capture characteristic aspects of leadership within this framing. The instrument Destrudo L (Larsson et al., 2012), which was designed for the military context, is suitable for both lower-level officers operating under field conditions and higher-level officers operating in office-like staff environments. To our knowledge, no instrument addresses destructive leadership in operational and dangerous contexts, which may be considered the core condition for performing military leadership (Hannah et al., 2013).

None of the reviewed articles examined the prevalence of destructive leadership, something that is also lacking in other settings. An exception to this rule is, for example, the national representative studies of Norwegian working life, performed by Aasland et al. (2010). However, the prevalence of destructive leadership in the military context has been addressed in military reports and non-peer-reviewed studies. A study by Reed and Olsen (2010) indicates that 18% of officers attending the Command War College in the US have experienced toxic leadership during their last year, while the annual Survey of Army Leadership (US) in 2010 indicates that about 20% of superiors are perceived as demonstrating patterns of negative or toxic behaviour (US Army, 2015). More systematic research is needed to examine the prevalence of destructive forms of leadership in different military populations and to compare such prevalence with that of civilian organisations in the same cultural or geographical area.

Practical implications

This systematic review shows that passive and active destructive leadership appear to have detrimental effects at both organisational and individual levels in military organisations, which is similar to the findings among civilian populations. The result underlines the need for measures that address both forms of unwanted and unacceptable leadership behaviours. Different strategies exist to prevent and manage these unwanted psychosocial risks at work, ranging from proactive measures and interventions aiming to stop, reverse or reduce the effects of destructive leadership, to the rehabilitation and restoration of a safe and healthy workplace (Vartia & Leka, 2011). Measures such as criteria for selection and promotion; development of leaders; organisational climate and culture; and guidelines, policies and procedures for prevention and intervention (including fair complaints procedures) have all been argued to have positive and reducing effects on the detrimental outcomes of destructive leadership (Avolio, Reichard, Hannah, Walumbwa, & Chan, 2009; Kelloway & Barling, 2010; Padilla et al., 2007). Applied knowledge and implemented measures in the organisation will often represent the difference between efficient handling of a situation and non-intervention that leads to detrimental outcomes. Nonetheless, studies on the potential effect of interventions are sorely needed in this field.

Conclusion

The present literature review and meta-study contribute to the emerging field of studies that address destructive forms of leadership by examining one specific type of organisational setting; in this case, the military. This review further expands our understanding of destructive leadership in the military context and the effects of different types of leadership, including both active and passive forms, as well as contrasting them with constructive forms of leadership.

Our findings support the assumption of systematic negative outcomes of active as well as passive forms of destructive leadership in the military, and importantly, the fact that the

detrimental consequences are of comparable magnitude for the two forms of destructive leadership. Interestingly; the effects of destructive leadership appear to be parallel to those of constructive leadership, yet in the opposite direction. Such knowledge is important because it increases our understanding of this unfavourable and undermining phenomenon in an organisation with a strong culture, hierarchy and pride in its leadership, while emphasising the importance of an active approach to prevent and reduce the antecedents and consequences of all forms of destructive leadership. Our study also documents the need for more research in the field of destructive leadership in a military context and a more diverse approach in terms of aims, research design and use of more objective outcomes.

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Ethical approval

This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent

This is a meta-analysis, and no informed consent statements were obtained. No primary data were collected from participants.

References

References marked with one asterisk indicate studies included in the meta-analysis, while two asterisks indicate studies included only in the review.

Aasland, M. S., Skogstad, A., Notelaers, G., Nielsen, M. B., & Einarsen, S. (2010). The prevalence of destructive leadership behaviour. *British Journal of Management*, 21, 438–452.

Antonakis, J. (2017). On doing better science: From thrill of discovery to policy implications. *The Leadership Quarterly*, 28, 5–21.

Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the multifactor leadership questionnaire. *The Leadership Quarterly*, 14, 261–295.

Antonakis, J., Bendahan, S., Jacquart, P., & Lalive, R. (2010). On making causal claims: A review and recommendations. *The Leadership Quarterly*, 21, 1086–1120.

Army, U. S. (2012). Army Leadership (ADRP 6-22). Headquarters, Departement of the Army. Retrieved from https://armypubs.us.army.mil/doctrine/index.html

Army, U. S. (2015). Center for Army Leadership Annual Survey of Army Leadership (CASAL): Military leader findings report. Technical Report 2015-01. U.S. Army Combined Arms Center. Retrieved from https://usacac.army.mil/sites/default/files/documents/cal/2015CASALMilitaryLeaderFindingsReport.pdf

Ashforth, B. E. (1997). Petty tyranny in organizations: A preliminary examination of antecedents and consequences. *Canadian Journal of Administrative Sciences*, 14, 126–140.

Avolio, B. J., Reichard, R. J., Hannah, S. T., Walumbwa, F. O., & Chan, A. (2009). A meta-analytic review of leadership impact research: Experimental and quasi-experimental studies. *The Leadership Quarterly*, 20, 764–784.

Bamberger, P. A., & Bacharach, S. B. (2006). Abusive supervision and subordinate problem drinking: Taking resistance, stress and subordinate personality into account. *Human Relations*, 59, 723–752. <Go to ISI>://WOS:000239387700001.

Barling, J., & Frone, M. R. (2017). If only my leader would just do something! passive leadership undermines employee well-being through role stressors and psychological resource depletion. *Stress and Health*, 33, 211–222.

Bartone, P. T., Eid, J., Johnsen, B. H., Laberg, J. C., & Snook, S. A. (2009). Big five personality factors, hardiness, and social judgment as predictors of leader performance. *Leadership & Organization Development Journal*, 30, 498–521.

Bass, B. M., & Avolio, B. J. (2004a). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks: Sage Publication.

Bass, B. M., & Avolio, B. J. (2004b). *Multifactor leadership questionnaire* (3rd ed.) Menlo Park, CA: Mind Garden

Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88, 207–218.

*Bass, B. M., & Yammarino, F. J. (1991). Congruence of self and others leadership ratings of naval officers for understanding successful performance. *Applied Psychology: An International Review*, 40, 437–454. <Go to ISI>://WOS:A1991GR60400007.

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2007). *Comprehensive meta-analysis (Version 3)*. Englewood, NJ: Biostat.

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, M. (2009). *Introduction to meta-analysis*. West Sussex, UK: Wiley.

Borgmann, L., Rowold, J., & Bormann, K. C. (2016). Integrating leadership research: A meta-analytical test of Yukl's meta-categories of leadership. *Personnel Review*, 45, 1340–1366.

**Britt, T. W., Wright, K. M., & Moore, D. (2012). Leadership as a predictor of stigma and practical barriers toward receiving mental health treatment: A multilevel approach. *Psychological Services*, 9, 26–37. <Go to ISI>://WOS:000300541400003.

Buch, R., Martinsen, Ø., & Kuvaas, B. (2015). The Destructiveness of laissez-faire leadership behavior: the mediating role of economic leader-member exchange relationships. *Journal of Leadership and Organizational Studies*, 22, 115–124.

Buss, A. (1961). *The psychology of aggression*. New York: John Wiley.

Center for Army Leadership. (2011). 2010 Annual Survey of Army Leadership (CASAL). Volume 1, Executive Summary. Technical Report 2010, US. U.S. Army Combined Arms Center. Retrived from https://usacac.army.mil/CAC2/Repository/CASAL_TechReport2011-1_V1.pdf

*Chi, S.-C. S., & Liang, S.-G. (2013). When do subordinates' emotion-regulation strategies matter? Abusive supervision, subordinates' emotional exhaustion, and work withdrawal. *The Leadership Quarterly*, 24, 125–137.

*Chou, W.-J., Sibley, C. G., Liu, J. H., Lin, -T.-T., & Cheng, B.-S. (2015). Paternalistic leadership profiles. *Group & Organization Management*, 40, 685–710.

Cohen, J. (1988). *Statistical power analysis for the behavioral-sciences* (2nd ed.): Erlbaum Associates, Hillsdale.

*Cole, M. S., & Bedeian, A. G. (2007). Leadership consensus as a cross-level contextual moderator of the emotional exhaustion–Work commitment relationship. *The Leadership Quarterly*, 18, 447–462.

Craig, S. B., & Kaiser, R. B. (2013). Destructive Leadership. In M. G. Rumsey (Ed.), *The oxford handbook of leadership* (pp. 439–454). New York, USA: Oxford University Press.

Daniels, K. (2018). Guidance on conducting and reviewing systematic reviews (and meta-analyses) in work and organizational psychology. *European Journal of Work and Organizational Psychology*, 28, 1–10.

Day, D. V., Fleenor, J. W., Atwater, L. E., Sturm, R. E., & McKee, R. A. (2014). Advances in leader and leadership development: A review of 25 years of research and theory. *The Leadership Quarterly*, 25, 63–82. <Go to ISI>://WOS:000330258900005.

De Hoogh, A. H. B., & Den Hartog, D. N. (2008). Ethical and despotic leadership, relationships with leader's social responsibility, top management team effectiveness and subordinates' optimism: A multi-method study. *The Leadership Quarterly*, 19, 297–311.

DeRue, D. S., Nahrgang, J. D., Wellman, N., & Humphrey, S. E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology*, 64, 7–52. <Go to ISI>://WOS:000287453000002.

*Duffy, M. K., Ganster, D. C., Shaw, J. D., Johnson, J. L., & Pagon, M. (2006). The social context of undermining behavior at work. *Organizational Behavior and Human Decision Processes*, 101, 105–126.

*Eid, J., Helge Johnsen, B., Bartone, P. T., & Nissestad, O. A. (2008). Growing transformational leaders: Exploring the role of personality hardiness. *Leadership & Organization Development Journal*, 29, 4–23.

Einarsen, S., Aasland, M. S., & Skogstad, A. (2007). Destructive leadership behaviour: A definition and conceptual model. *The Leadership Quarterly*, 18, 207–216.

Eissa, G., & Lester, S. W. (2017). Supervisor role overload and frustration as antecedents of abusive supervision: The moderating role of supervisor personality. *Journal of Organizational Behavior*, 38, 307–326.

*Fors Brandebo, M., Nilsson, S., & Larsson, G. (2016). Leadership: Is bad stronger than good? *Leadership & Organization Development Journal*, 37, 690–710.

*Gallus, J. A., Walsh, B. M., van Driel, M., Gouge, M. C., & Antolic, E. (2013). Intolerable cruelty: A multilevel examination of the impact of toxic leadership on U.S. military units and service members. *Military Psychology*, 25, 588–601.

Guyatt, G., Oxman, A. D., Akl, E. A., Kunz, R., Vist, G., Brozek, J., ... Schunemann, H. J. (2011). GRADE guidelines: 1. Introduction-GRADE evidence profiles and summary of findings tables. *Journal of Clinical Epidemiology*, 64, 383–394. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/21195583.

*Hannah, S., John., M., Peng, A. C., Lord, R. G., Trevino, L. K., Kozlowski, S. W., ... Doty, J. (2013). Joint influences of individual and work unit abusive supervision on ethical intentions and behaviors: A moderated mediation model. *Journal of Applied Psychology*, 98, 579–592. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/23647209.

Hannah & Sowden. (2013). Leadership in the profession of arms. In M. G. Rumsey (Ed.), *The Oxford handbook of leadership* (pp. 291–310). New York: Oxford University Press.

Harris, K. J., Harvey, P., & Kacmar, K. M. (2011). Abusive supervisory reactions to coworker relationship conflict. *The Leadership Quarterly*, 22, 1010–1023.

Harris, K. J, Kacmar, K. M., & Zivnuska, S. (2007). An investigation of abusive supervision as a predictor of performance and the meaning of work as a moderator of the relationship. *The Leadership Quarterly*, 18, 252–263.

Hartung, J., Knapp, G., & Sinha, B. K. (2008). Meta-regression. In J. Hartung, G. Knapp, & B. K. Sinha (Eds.), *Statistical meta-analysis with applications* (pp. 127–137). Hoboken, New Jersey,: John Wiley & Sons, Inc.

Hauge, L. J., Skogstad, A., & Einarsen, S. (2007). Relationships between stressful work environments and bullying: Results of a large representative study. *Work & Stress*, 21, 220–242.

Hershcovis, M. S. (2011). "Incivility, social undermining, bullying ... oh my!": A call to reconcile constructs within workplace aggression research. *Journal of Organizational Behavior*, 32, 499–519.

Hershcovis, M. S., & Barling, J. (2010). Towards a multi-foci approach to workplace aggression: A meta-analytic review of outcomes from different perpetrators. *Journal of Organizational Behavior*, 31, 24–44.

Hinkin, T. R., & Schriesheim, C. A. (2008). An examination of "nonleadership": From laissez-faire leadership to leader reward omission and punishment omission. *Journal of Applied Psychology*, 93, 1234–1248. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/19025245.

Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings* (2nd ed.). London: Sage Publication.

*Johansen, R. B., & Platek, T. A. (2017). Destructive leader behavior in the norwegian armed forces. *Arts and Social Sciences Journal*, 8. doi:10.4172/2151-6200.1000255

**Johnsen, B. H., Eid, J., Pallesen, S., Bartone, P. T., & Nissestad, O. A. (2009). Predicting transformational leadership in naval cadets: effects of personality hardiness and training. *Journal of Applied Social Psychology*, 39, 2213–2235. <Go to ISI>://WOS:000269581600009.

Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755–768.

Kelloway, E. K., & Barling, J. (2010). Leadership development as an intervention in occupational health psychology. *Work & Stress*, 24, 260–279.

Kelloway, E. K., Mullen, J., & Francis, L. (2006). Divergent effects of transformational and passive leadership on employee safety. *Journal of Occupational Health Psychology*, 11, 76–86. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/16551176.

Kelloway, E. K., Sivanathan, N., Francis, L., & Barling, J. (2005). Poor Leadership. In J. Barling, E. K. Kelloway, & M. R. Frone (Eds.), *Handbook of workplace stress* (pp. 89–112). Thousand Oaks, CA: Sage.

Klaussner, S. (2014). Engulfed in the abyss: The emergence of abusive supervision as an escalating process of supervisor–Subordinate interaction. *Human Relations*, 67, 311–332.

Krasikova, D. V., Green, S. G., & LeBreton, J. M. (2013). Destructive Leadership. *Journal of Management*, 39, 1308–1338.

*Larsson, G., Fors Brandebo, M., & Nilsson, S. (2012). Destrudo-L. Development of a short scale designed to measure destructive leadership behaviours in a military context. *Leadership & Organization Development Journal*, 33, 383–400.

Lipman-Blumen, J. (2006). *The allure of toxic leaders: Why we follow destructive bosses and corrupt politicians-and how we can survive them*. New York: Oxford University Press.

*Luria, G. (2008). Climate strength – How leaders form consensus. *The Leadership Quarterly*, 19, 42–53.

Mackey, J. D., Frieder, R. E., Brees, J. R., & Martinko, M. J. (2017). Abusive supervision: A meta-analysis and empirical review. *Journal of Management*, 43, 1940–1965.

Maddi, S. R. (2007). Relevance of hardiness assessment and training to the military context. *Military Psychology*, 19, 61–70.

Martinko, M. J., Harvey, P., Brees, J. R., & Mackey, J. (2013). A review of abusive supervision research. *Journal of Organizational Behavior*, 34, 120–137.

Martinussen, M., & Bjørnstad, J. F. (1999). Meta-analysis calculations based on independent and nonindependent cases. *Educational and Psychological Measurement*, 59, 928–950.

Mathisen, G. E., Einarsen, S., & Mykletun, R. (2008). The occurrences and correlates of bullying and harassment in the restaurant sector. *Scand J Psychol*, 49, 59–68. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/18190403.

McGowan, J., Sampson, M., Salzwedel, D. M., Cogo, E., Foerster, V., & Lefebvre, C. (2016). PRESS peer review of electronic search strategies: 2015 guideline statement. *Journal of Clinical Epidemiology*, 75, 40–46. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/27005575.

*McGurk, D., Sinclair, R. R., Thomas, J. L., Merrill, J. C., Bliese, P. D., & Castro, C. A. (2014). Destructive and supportive leadership in Extremis. *Military Behavioral Health*, 2, 240–256.

Montano, D., Reeske, A., Franke, F., & Hüffmeier, J. (2017). Leadership, followers' mental health and job performance in organizations: A comprehensive meta-analysis from an occupational health perspective. *Journal of Organizational Behavior*, 38, 327–350.

Munn, Z., Moola, S., Riitano, D., & Lisy, K. (2014). The development of a critical appraisal tool for use in systematic reviews addressing questions of prevalence. *International Journal of Health Policy Management*, 3, 123–128. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/25197676.

*Nahum-Shani, I., Henderson, M. M., Lim, S., & Vinokur, A. D. (2014). Supervisor support: Does supervisor support buffer or exacerbate the adverse effects of supervisor undermining? *Journal of Applied*

Psychology, *99*, 484–503. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/24490969.

Naseer, S., Raja, U., Syed, F., Donia, M. B. L., & Darr, W. (2016). Perils of being close to a bad leader in a bad environment: Exploring the combined effects of despotic leadership, leader member exchange, and perceived organizational politics on behaviors. *The Leadership Quarterly*, *27*, 14–33.

*Olsen, O. K., Eid, J., & Johnsen, B. H. (2006). Moral behavior and transformational leadership in norwegian naval cadets. *Military Psychology*, *18*, 37–56. <Go to ISI>://WOS:000243006000004.

**Olsen, O. K., Pallesen, S., Torsheim, T., & Espevik, R. (2016). The effect of sleep deprivation on leadership behaviour in military officers: An experimental study. *Journal of Sleep Research*, *25*, 683–689. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/27231096.

Padilla, A., Hogan, R., & Kaiser, R. B. (2007). The toxic triangle: Destructive leaders, susceptible followers, and conducive environments. *The Leadership Quarterly*, *18*, 176–194.

Parrott, D. J., & Giancola, P. R. (2007). Addressing "The criterion problem" in the assessment of aggressive behavior: Development of a new taxonomic system. *Aggression and Violent Behavior*, *12*, 280–299.

Piccolo, R. F., Bono, J. E., Heinitz, K., Rowold, J., Duehr, E., & Judge, T. A. (2012). The relative impact of complementary leader behaviors: Which matter most? *The Leadership Quarterly*, *23*, 567–581.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879–903.

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research - Problems and prospects. *Journal of Management*, *12*, 531–544. <Go to ISI>://WOS:A1986G162600007.

Reed, G. E. (2015). *Tarnished. toxic leadership in the U.S.* Nebraska, NE: Military Potomac Books, University of Nebraska Press.

Reed, G. E., & Bullis, R. C. (2009). The impact of destructive leadership on senior military officers and civilian employees. *Armed Forces & Society*, *36*, 5–18.

*Reed, G. E., & Olsen, R. A. (2010). Toxic leadership: Part deux. *Military Review*, *90*, 58–64.

*Roush, P., & Atwater, L. E. (1992). Using MBTI to understand transformational leadership and self-perception accuracy. *Military Psychology*, *4*, 17–34.

**Sadler, A. G., Mengeling, M. A., Booth, B. M., O´Shea, A. M. J., & Tomer, J. C. (2017). The relationship between us military officer leadership behaviors and risk of sexual assault of reserve, national guard, and active component servicewomen in nondeployed locations. *American Journal of Public Health*, *107*, 147–155. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/21917618.

*Schiena, R. D., Letens, G., Van Aken, E., & Farris, J. (2013). Relationship between leadership and characteristics of learning organizations in deployed military units: An exploratory study. *Administrative Sciences*, *3*, 143–165.

Schilling, J., & Schyns, B. (2014). Editorial. The causes and consequences of bad leadership. *Zeitschrift Für Psychologie*, *222*, 187–189.

Schyns, B., & Schilling, J. (2013). How bad are the effects of bad leaders? A meta-analysis of destructive leadership and its outcomes. *The Leadership Quarterly*, *24*, 138–158.

Shadish, W., Cook, T. D., & Campbell, D. T. (2003). *Experimental and Quasi-experimental designs for generalized causal inference*. Boston: Houghton Mifflin Company.

Sharma, P. N. (2017). Moving beyond the employee: The role of the organizational context in leader workplace aggression. *The Leadership Quarterly*, *29*, 203–217.

Skogstad, A. (2015). Effektiv ivaretagende ledelse: Viktige perspektiver og modeller [Efficient and considerate leadership; important perspectives and models] In S. Einarsen & A. Skogstad (Eds.), *Ledelse på godt og vondt [Leadership as good and bad]* (2nd ed., pp. 15–45). Bergen: Fagbokforlaget

Skogstad, A., Aasland, M. S., Nielsen, M. B., Hetland, J., Matthiesen, S. B., & Einarsen, S. (2014). The relative effects of constructive, laissez-faire, and tyrannical leadership on subordinate job satisfaction: Results from two prospective and representative studies. *Zeitschrift Für Psychologie*, *222*, 221–232.

Skogstad, A., Einarsen, S., Torsheim, T., Aasland, M. S., & Hetland, H. (2007). The destructiveness of laissez-faire leadership behavior. *Journal of Occupational Health Psychology*, *12*, 80–92.

Skogstad, A., Hetland, J., Glasø, L., & Einarsen, S. (2014). Is avoidant leadership a root cause of subordinate stress? Longitudinal relationships between laissez-faire leadership and role ambiguity. *Work & Stress*, *28*, 323–341.

Skogstad, A., Nielsen, M. B., & Einarsen, S. (2017). Destructive forms of leadership and their relationships with employee well-being. In E. K. Kelloway, K. Nielsen, & J. K. Dimoff (Eds.), *Leading to occupational health and safety: how leadership behaviours impact organizational safety and well-being* (pp. 163–196). West Sussex, UK: Wiley-Blackwell.

Sterne, J. A., Sutton, A. J., Ioannidis, J. P., Terrin, N., Jones, D. R., Lau, J., ... Higgins, J. P. (2011). Recommendations for examining and interpreting funnel plot asymmetry in meta-analyses of randomised controlled trials. *BMJ*, *343*, d4002. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/21784880.

*Taylor, T. Z., Psotka, J., & Legree, P. (2015). Relationships among applications of tacit knowledge and transformational/transactional leader styles. *Leadership & Organization Development Journal*, *36*, 120–136.

Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Of Management Journal*, *43*, 178–190.

Tepper, B. J. (2007). Abusive supervision in work organizations: Review, synthesis, and research agenda. *Journal of Management*, *33*, 261–289.

Tepper, B. J., Simon, L., & Park, H. M. (2017).Abusive Supervision. *The Annual Review of Organizational Psychology and Organizational Behavior*, *4*, 123–152. doi:10.1146/annurev-orgpsych-041015-062539

Thoroughgood, C. N., Tate, B. W., Sawyer, K. B., & Jacobs, R. (2012). Bad to the bone. empirically defining and measuring destructive leader behavior. *Journal of Leadership & Organizational Studies*, *19*, 230–255.

Van de Vliert, E., Matthiesen, S. B., Gangsøy, R., Landro, A. B., & Einarsen, S. (2010). Winters, summers, and destructive leadership cultures in rich regions. *Cross-Cultural Research*, *44*, 315–340.

Vartia, M., & Leka, S. (2011). Interventions for the prevention and management of bullying at work. In S. Einarsen, H. Hoel, D. Zapf, & C. L. Cooper (Eds.), *Bullying and harassment in the workplace: Developments in theory, research, and practice* (2 ed., pp. 359–379). USA: CRC Press, Taylor & Francis Group.

Velez, M. J., & Neves, P. (2016). Abusive supervision, psychosomatic symptoms, and deviance: Can job autonomy make a difference? *Journal of Occupational Health Psychology*, *21*, 322–333. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/26641485

Wang, M., Sinclair, R. R., & Deese, M. N. (2010). Understanding the causes of destructive leadership behavior: A dual-process model. In B. Schyns & T. K. Hansbrough (Eds.), *When leadership goes wrong: Destructive leadership, mistakes, and ethical failures* (pp. 73–97). Charlotte: Information Age Publishing.

Weiss, H. M., & Cropanzano, R. (1996). Affective Events Theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews* (Vol. 18, pp. 1–74). Elsevier Science/JAI Press.

Wong, L., Bliese, P., & McGurk, D. (2003). Military leadership: A context specific review. *The Leadership Quarterly*, *14*, 657–692.

*Yammarino, F. J., & Bass, B. M. (1990). Transformational leadership and multiple levels of analysis. *Human Relations*, *43*, 975–995. <Go to ISI>://WOS:A1990EF19800003.

**Yammarino, F. J., Spangler, W. D., & Bass, B. M. (1993). Transformational leadership and performance A longitudinal investigation. *Leadership Quartely*, *4*, 81–102.

Yan, Q., Bligh, M. C., & Kohles, J. C. (2014). Absence makes the errors go longer: How leaders inhibit learning from errors. *Zeitschrift Für Psychologie*, *222*, 233–245.

Yukl, G. (2013). *Leadership in Organizations* (8th ed.). Essex: Pearson Education Limited.

Zellars, K. L., Tepper, B. J., & Duffy, M. K. (2002). Abusive supervision and subordinates' organizational citizenship behavior. *Journal of Applied Psychology*, *87*, 1068–1076.

Zhang, Y., & Bednall, C. (2015). Antecedents of abusive supervision: A meta-analytic review. *Journal of Business Ethics*, 1–17. doi:10.1007/s10551-015-2657-6

Zhang, Y., & Liao, Z. (2015). Consequences of abusive supervision: A meta-analytic review. *Asia Pacific Journal of Management*, *32*, 959–987. <Go to ISI>://WOS:000368531900007.