

Original Communication

Appreciation at Work
in the Swiss Armed ForcesDésirée Stocker¹, Nicola Jacobshagen², Norbert K. Semmer², and Hubert Annen³¹University of Bern, Switzerland, ²University of Bern and Swiss Centre for Affective Sciences, Geneva, Switzerland, ³Swiss Military Academy at ETH Zurich, Switzerland

Abstract. This study explores the impact of appreciation at work among military professionals. Based on the concept of “Stress-as-Offense-to-Self” (Semmer, Jacobshagen, Meier, & Elfering, 2007), appreciation is a possible resource due to boosts to self-esteem. We measured appreciation at work with a scale differentiating several forms and sources of appreciation. Data were gathered by an online survey of 228 male career officers and career noncommissioned officers of the Swiss Armed Forces. Appreciation at work correlated positively with job satisfaction and negatively with feelings of resentment. Moreover, appreciation at work explained incremental variance over and above job control, social support, and interactional justice. These results underline its distinction from other resource variables. Legal employment conditions of the military professionals include working hours in accordance with ongoing requirements without upper limits established. Moderator analysis showed that appreciation buffered the effect of long working hours on job satisfaction. Furthermore, appreciation mediated the effect of illegitimate tasks on job satisfaction as well as on feelings of resentment. Overall, these findings imply that it is worth building an organisational culture based on appreciation at work. Implications for research and military training are discussed.

Keywords: stress, appreciation, military working conditions, moderation, mediation

Introduction

What a pleasure! Your boss congratulates you on a project well-done. Or one of your colleagues shows gratitude for your support. We all know the delight stemming from the appreciation that we receive at work. It gives us the feeling of being acknowledged and likely encourages us to work even harder. Herzberg (1974) was among the first to recognise that appreciation enhances motivation and job satisfaction. However, despite this early recognition, only little research has been done since on this issue. In the effort-reward model by Siegrist (1996), appreciation is one of the three reward factors along with money and job security/career opportunities, and findings by Van Vegchel, De Jonge, Bakker, and Schaufeli (2002) suggest that it is the most important one. A recent study has shown that young workers experienced higher job satisfaction if appreciation was high over the course of four years (Elfering, Semmer, Tschan, Kälin, & Bucher, 2007). Yet, the few scales measuring appreciation tend to be rather general (e.g., Siegrist, 1996; Yukl, 2002). Hence, questions about sources, forms, aspects, circumstances, and effects of appreciation at work remain unanswered by scientific research.

Generally, appreciation relates to evaluation by others (Semmer & Jacobshagen, 2003) and is closely connected

to self-esteem (Harter, 1993). Most people want to achieve a positive evaluation in order to protect their self-esteem (Baumeister, 1996). Consequently, a threat to self-esteem may provoke the experience of stress. According to the “Stress-as-Offense-to-Self” concept (SOS; Semmer, Jacobshagen, Meier, & Elfering, 2007), the threat to the self is seen as a core element of many stress experiences. Lack of appreciation constitutes such a threat; it may manifest itself not only in dismissive behaviour, but also in “illegitimate tasks” (Semmer, Tschan, Meier, Facchin, & Jacobshagen, 2010). Illegitimate tasks are tasks that are perceived as unreasonable or unnecessary, as not being part of one’s professional role, thus violating expectations about what can reasonably be required of a given person. On the other hand, appreciation “boosts” self-esteem and is therefore regarded as an important cause of well-being and a powerful resource in the context of stress (Semmer et al., 2007). Although the role of appreciation is hardly disputed, to our knowledge no scale exists that goes beyond only mentioning appreciation in general as part of other constructs (such as leadership) to also focus on appreciation and distinguish between the various forms in which it is communicated. The present study is the first to report results obtained with such a scale.

There are several sources of stress for Swiss military professionals. For instance, the employment conditions of officers and noncommissioned officers [Unteroffiziere]

include working hours in accordance with ongoing requirements and without strict upper limits (Eidgenössisches Departement für Verteidigung, Bevölkerungsschutz und Sport, 2003). Moreover, the budget for military defense has been substantially reduced (Haltiner & Würmli, 2008) as it has in other Western nations since the end of the Cold War (Cronin, 1998). At the same time, recruitment and retention of military personnel has become more difficult, facing competition from the private sector (Annen, 2004). Finally, several reforms have entailed changes in responsibilities and duties (see Schweizerische Eidgenossenschaft, 2006). These circumstances require the armed services “to do more with less” (Lau, 1998, p. 49). Military research has shown that shared stressors at the group level intensify the effects of person-level stressors on morale and commitment (Tucker, Sinclair, & Thomas, 2005). Furthermore, multiple responsibilities result in strain for the remaining staff (Gareis, Haltiner, & Klein, 2006) and contribute to job dissatisfaction (Langer, 2006). In this context, it seems worthwhile to examine appreciation at work in a military setting as a possible resource in the prevention of stress.

Resources such as social support (Viswesvaran, Sanchez, & Fisher, 1999) and job control (Karasek & Theorell, 1990; Spector, 1986) are much-examined resources in work and organisational psychology. More recently, the role of organisational justice, especially interactional justice, in the stress process has been emphasised (Greenberg & Colquitt, 2005; see also the reciprocity concepts by Schaufeli, 2006; and Siegrist, 1996). One of the most important reasons why reciprocity and justice are so important is because of their implications for the self. Injustice and lack of reciprocity signal a lack of social acceptance (e.g., De Cremer & Tyler, 2005). However, these implications are rather indirect; they have to be inferred from the relationship between input and output (reciprocity; distributive justice) or from the violation of procedural fairness rules (procedural justice). Similarly, social support is important because of its implications for being accepted and cared for (Sarason, Sarason, Brock, & Pierce, 1996; Semmer et al., 2008). Interactional justice is more directly related to the self, but the construct is typically assessed in rather general terms, referring to respectful treatment but not to specific behaviours. Appreciation goes beyond these concepts of justice and support by referring (1) to specific behaviours that (2) directly and explicitly signal acknowledgment of one’s characteristics and/or behaviours, and thus an enhancement of one’s self (Semmer et al., 2007).

This study examines the following questions: First, we analyse appreciation at work as a resource in comparison with other resources at work among military professionals. We expect that appreciation is related to job satisfaction and feelings of resentment toward one’s organisation and that this association will be retained when other resources are controlled (*Hypothesis 1*). Second, we analyse the relation between military working conditions in terms

of working hours as a stressor variable, appreciation at work as a moderator variable, and well-being in terms of job satisfaction and feelings of resentment. We expect that hours worked will be related to job satisfaction and feelings of resentment more strongly when appreciation is low (*Hypothesis 2*). This hypothesis may be regarded as a variant of the concept of effort-reward imbalance (Siegrist, 1996; see Van der Hulst & Geurts, 2001). Third, we test the relatively new concept of illegitimate tasks (Semmer et al., 2007; Semmer, Tschan et al., 2010) in the context of appreciation. Illegitimate tasks are related to strain (Semmer, Jacobshagen, Meier, & Elfering, 2010). If illegitimate tasks do, indeed, signal a lack of appreciation, a direct measure of appreciation should act as a mediator between illegitimate tasks and well-being; this assumption constitutes *Hypothesis 3*.

Method

To be eligible for the study, participants had to be employed as career officers [Berufsoffiziere] or as career noncommissioned officers [Berufsunteroffiziere]. This type of employment entails working hours in accordance with ongoing requirements, without upper limits established (as mentioned above). Militia personnel [Milizangehörige] and contracted military personnel [Zeitmilitär] were excluded due to different conditions of employment and time-limited commitment, respectively. Women, pilots, and general officers [höhere Stabsoffiziere] were not included because of small numbers or special status.

A lecturer at the Military Academy at ETH Zurich contacted 150 career officers and 150 career noncommissioned officers, who were drawn randomly from a list of 1632 eligible individuals. Contact was established via the internal mail system. In the e-mail, the investigation of appreciation in the Swiss Armed Forces was explained as the goal of the survey; confidentiality of the responses was assured and the link to the online survey was provided. Participation was voluntary and the questionnaire was in German.

Participants

Usable surveys were completed by 228 individuals, corresponding to a response rate of 76%. The sample comprised 111 officers (49%) and 117 noncommissioned officers (51%); the average age was 41 years ($SD = 8.67$); the average length of service was 14 years ($SD = 9.19$); 181 individuals (79.4%) worked in a function involving direct contact with trainees (as commanders in military schools or competence centres); and 47 subjects (20.6%) worked as staff members.

Measures and Instruments

Resources at Work

Appreciation at work was measured with 10 items concerning appreciation by supervisors and co-workers. The items ask about different forms of appreciation such as compliments, understanding, trust, sympathy, attention, interest, and gratitude. Sample items are “My colleagues ask for my advice,” “When I perform a task well, other interesting tasks are assigned to me,” “When talking with my supervisor I can voice my opinion,” or “My colleagues notice when I show extra effort.” Participants were asked to indicate the extent to which the statements applied to their work situation on a 7-point scale ranging from (1) *not at all* to (7) *very much*. As expected, factor analysis yielded two subscales referring to appreciation by supervisors (5 items) and co-workers (5 items), respectively. The two subscales were correlated with one another ($r = .40$, $p < .001$) indicating that they were to some degree independent, yet also reflected a general “climate of appreciation.” As we were interested in the appreciation experienced by our participants in general, we felt that it was more adequate to use the total scale. As shown in Table 1, internal consistency for the total scale was high.

Six items from the instrument for stress-related job analysis were used to measure *job control* (Semmer, Zapf, & Dunckel, 1995). A sample item is “Is it possible for you to organise your work tasks independently?” The 5-point response scale ranged from (1) *very little* to (5) *very much*.

Social support was measured using Frese’s (1989) German adaptation of the scales by Caplan, Cobb, French, Harrison, and Pinneau (1982). The question, “How much can each of these people be relied upon when things get tough at work?” was to be rated with respect to (a) supervisors, (b) partner or family, and (c) colleagues on a 5-point scale ranging from (1) *not at all* to (5) *very much*. Participants were also able to check “I don’t have a partner.”

Interactional justice was measured with four items by Colquitt (2001). Participants were to indicate how strongly they agreed with statements concerning the way in which procedures are carried out by their supervisor. A sample item is “Does your supervisor treat you with dignity?” The response format ranged from (1) *not at all* to (5) *absolutely*.

Stressors at Work

Working hours were measured with the item “How many hours per week do you normally spend on work activities in your function as an officer or noncommissioned officer?”

Illegitimate tasks were assessed with the Bern Illegitimate Task Scale (Semmer, Tschan et al., 2010). Sample items are “Do you have work tasks to take care of which keep you wondering if they have to be done at all?” “Do you have work tasks to take care of which you believe

should be done by someone else?” The scale has 8 items and answers are in Likert format, ranging from (1) *never* to (5) *frequently*. The scale is divided into two subscales, referring to unnecessary tasks and to unreasonable tasks, respectively. The scales correlate with one another ($r = .65$, $p < .001$). As shown by Semmer et al. (Semmer, Jacobshagen et al., 2010; Semmer, Tschan et al., 2010), however, illegitimate tasks can successfully be modeled as a second-order construct. As we were interested in the construct of illegitimate tasks as a whole, we used the total scale, which had very good internal consistency (see Table 1).

Outcome Variables

Job satisfaction was assessed with three items (Baillod & Semmer, 1994). A sample item is “I hope my work situation will stay as good as it is right now.” Participants were asked to indicate how often they think this way about their work and were to respond on a 7-point scale ranging from (1) *never* to (7) *always*.

Feelings of resentment were assessed with the 7-item scale by Geurts, Schaufeli, and Rutte (1999). They referred to negative feelings such as anger, indignation, or disappointment toward one’s organisation. The response format was a 7-point scale ranging from (1) *not at all* to (7) *very much*.

Control Variables

It is customary to control for a variety of potentially confounding variables in research such as this. Methodologists advise, however, against the excessive use of control variables since it becomes increasingly difficult to assess the exact meaning of a construct when many other variables are partialled out. Including potentially confounding variables should, therefore, be based on a clear rationale (see Breaugh, 2008).

There are two variables that we feel are necessary to control for. Job satisfaction has been shown to be higher on average at a higher age (Spector, 1997). Since we were interested in the effects of appreciation, not of age, we included age as a control variable. Furthermore, we were advised by military professionals that working time and stress level were likely to be higher for commanders [Kommandanten] (in military schools or competence centres) than for staff members [Stabspersonal]. Therefore, a control variable *function* was created that referred to these two functions.

Results

Table 1 presents means, standard deviations, correlations, and reliability estimates (Cronbach’s α) for all study vari-

Table 1

Study variables: Means, standard deviations, intercorrelations, and Cronbach's α ($N = 228$)

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Age	41.41	8.67									
2. Function	0.21	.41	.37**								
3. Appreciation at work	5.39	.79	.18**	.17*	(.86)						
4. Job control	4.00	.63	.28**	.20**	.33**	(.84)					
5. Social support ^a	3.88	.83	-.21**	-.06	.31**	-.08	(.79)				
6. Interactional justice	4.03	.67	.14*	.25**	.62**	.35**	.25**	(.73)			
7. Working hours	55.98	7.04	-.07	-.14*	.04	.03	-.02	.02			
8. Illegitimate tasks	2.64	.63	-.07	-.11	-.40**	-.21**	-.10	-.38**	.11	(.88)	
9. Job satisfaction	3.92	.65	.14*	.01	.38**	.22**	.05	.26**	-.01	-.24**	(.81)
10. Feelings of resentment	2.91	1.25	-.11	-.19**	-.47**	-.33**	-.21**	-.50**	.09	.56**	-.25** (.90)

Note. ^a $N = 217$ (Participants who checked "I don't have a partner, etc." were excluded). Coefficients in the diagonal (in parentheses) show Cronbach's α . * $p < .05$, ** $p < .01$.

Table 2

Hierarchical regression analysis predicting job satisfaction ($N = 228$)

Variables	Step 1			Step 2			Step 3			R^2	ΔR^2
	B	SE B	β	B	SE B	β	B	SE B	β		
Age	.01	.01	.14	.01	.01	.11	.01	.01	.07		
Function	-.17	.12	-.11	-.27	.12	-.17*	-.25	.11	-.16*	.02	.02
Job control				.14	.07	.15	.10	.07	.10		
Social support				.02	.05	.02	-.03	.05	-.04		
Interactional justice				.19	.07	.20*	.05	.08	.05	.10	.08**
Appreciation							.24	.07	.30***	.15	.05***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3

Hierarchical regression analysis predicting feelings of resentment ($N = 228$)

Variables	Step 1			Step 2			Step 3			R^2	ΔR^2
	B	SE B	β	B	SE B	β	B	SE B	β		
Age	-.01	.01	-.05	-.00	.01	-.03	.00	.01	-.01		
Function	-.47	.23	-.15*	-.10	.20	-.03	-.13	.20	-.04	.03	.03*
Job control				-.37	.13	-.19**	-.32	.13	-.16*		
Social support				-.21	.10	-.14*	-.14	.10	-.10		
Interactional justice				-.70	.13	-.37***	-.52	.14	-.28***	.28	.25***
Appreciation							-.30	.12	-.19*	.30	.02*

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

ables. The relationships between appreciation at work and the outcome variables job satisfaction and feelings of resentment were significant and in the anticipated direction. Appreciation was positively related to job satisfaction and negatively related to feelings of resentment. As expected, appreciation correlated with job control, social support, and interactional justice, but these correlations were lower than $r = .65$ (see Table 1), indicating that we are dealing with related but not identical constructs.

Tables 2 and 3 present the results of the hierarchical multiple regression analyses. The two outcome variables,

which are only moderately correlated, were analysed separately. Appreciation explained significant variance in both job satisfaction and feelings of resentment over and above age and function as well as the resources job control, social support, and interactional justice. *Hypothesis 1* is therefore supported for both dependent variables.

Working hours did not correlate significantly with either job satisfaction or feelings of resentment (see Table 1). To analyse the impact of appreciation at work as a moderator variable, hierarchical multiple regression was conducted. In the first step, the two control variables age and function were

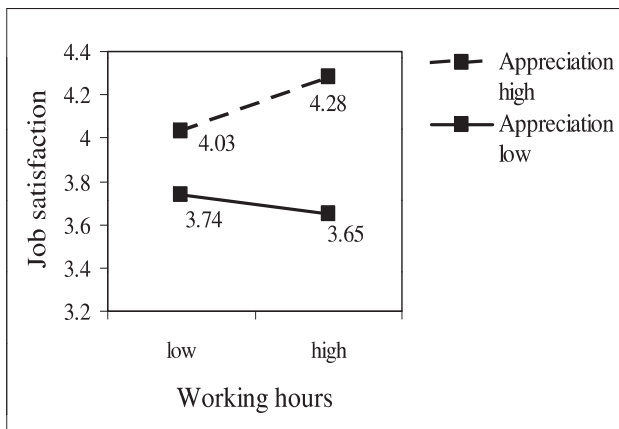


Figure 1. Buffer effect of appreciation at work on the relationship between working hours and job satisfaction ($N = 228$). Note. Moderation $p = .049$. $\beta = .12$. Controlled for age and function.

entered. In the second step, working hours and appreciation were entered as main effects and, finally, the interaction between working hours and appreciation was entered in step 3. To facilitate the interpretation of main effects in models containing interaction terms, predictor variables were centered (see Aiken & West, 1991). Appreciation acted as a significant moderator between working hours and job satisfaction ($\beta = .12$, $p = .049$). The buffering effect of appreciation at work can be seen in Figure 1. When appreciation was low, longer working hours led to decreased job satisfaction, and when appreciation was high, job satisfaction even increased with longer working hours. With feelings of resentment as the dependent variable, the pattern was the same, but the interaction missed the conventional level of statistical significance ($\beta = .09$, $p = .138$). Hypothesis 2 therefore receives full support for job satisfaction, but only weak support for feelings of resentment. Since the interaction between demands and control is a central part of the well-known Job Demands-Control model (Karasek & Theorell, 1990), we also tested whether job control moderated the relationship between working hours and

outcomes; this was not the case. Moreover, neither social support nor interactional justice moderated this relationship.

Hypothesis 3 assumed appreciation as a mediator between illegitimate tasks and the two outcome variables. The conditions for mediation analyses were fulfilled (Baron & Kenny, 1986). Illegitimate tasks predicted both outcome variables and it correlated with the mediator (appreciation), which, in turn, predicted both outcome variables. As shown in Figure 2, appreciation mediated the association of illegitimate tasks with job satisfaction fully and with feelings of resentment partially. Age and function were controlled in the first step. The Sobel (1982) test was highly significant in both cases.

Discussion

Interpreting the Findings

The present research confirms the role of appreciation at work in a threefold way. First, we show that appreciation explains variance in two indicators of well-being, one being more cognitive (job satisfaction), the other more affective (feelings of resentment; see Warr, 2007), and it does so over and above well-established resources. Second, we show that appreciation moderates the effect of long working hours on job satisfaction: Under conditions of high appreciation, long working hours actually increase job satisfaction. Third, we confirm that appreciation mediates the effect of illegitimate tasks on well-being. All three results are in line with the basic assumption of the SOS concept that the implications of stressors and resources for the self constitute an important aspect of the stress process.

Appreciation signals acknowledgment and recognition in an explicit and direct way. People make compliments, they acknowledge one's effort, they appreciate one's help, and supervisors assign interesting tasks when one has done a good job. The implications for the self are obvious. At the same time, it is undisputed that social support and in-

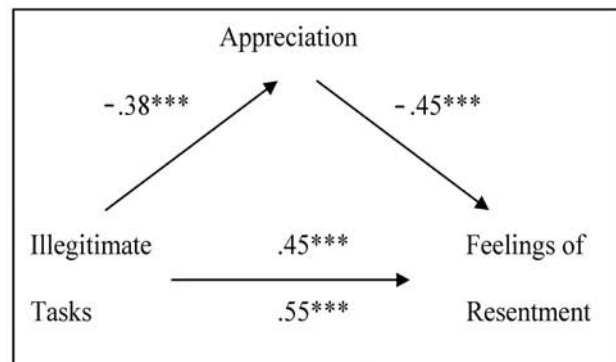
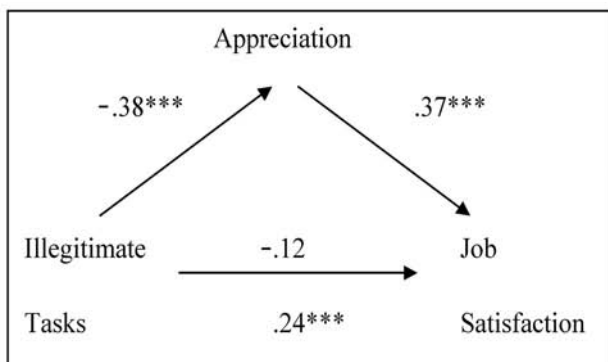


Figure 2. Appreciation as a mediator between illegitimate tasks and job satisfaction or feelings of resentment ($N = 228$). Note. Standardised β coefficients are reported. Coefficients above/below the horizontal arrow show β weights of the independent variable with/without control for appreciation. Sobel test (Aroian test equation): Job satisfaction $z = -3.79***$, Feelings of resentment $z = 3.76***$. *** $p < .001$.

teractional justice also have implications for the self, signaling acceptance and acknowledgment. Not surprisingly, therefore, these resources correlate with appreciation, and (with the exception of support and job satisfaction) all three variables correlate with well-being. One might also argue that control has, beyond the advantages discussed in the occupational stress literature (e.g., Spector, 1998), implications for the self as well, signaling that others have confidence in one's competence and dependability, and implying that one can feel responsible for one's own actions (Hackman & Oldham, 1980). Against this background, it is especially noteworthy that appreciation explains variance in well-being over and above these three resources.

Following Breugh's (2008) recommendation to try to understand the meaning of the variance in a variable that is left after other variables are controlled, we feel that there are two unique aspects to appreciation as we assessed it. First, as mentioned above, many of the items in our measure refer to rather specific appreciative behaviours (as compared to measures of organisational justice, but also to control) and to the actual display of such behaviours (as opposed to a general expectation in social support measures). It seems that this specificity is important over and above the general feeling of being accepted. Second, being treated with dignity, as implied by interactional justice, is something people feel entitled to (Cropanzano, Byrne, Bobocel, & Rupp, 2001). Similarly, one would expect to be supported in difficult situations. Appreciation, on the other hand, is rather special in that it involves something like an "extra effort" that goes beyond the bare minimum of what one is entitled to.

Second, with a mean of almost 56 h per week, the reported working time is long and comparable to the working schedules of private sector managers (Brett & Stroh, 2003; Jacobs-hagen, Amstad, Semmer, & Kuster, 2005). The number of hours worked has been shown to be associated with well-being (Jacobshagen et al., 2005); however, the association is rather weak overall (Sparks, Cooper, Fried, & Shirom, 1997). In the present study, working hours did not correlate with job satisfaction or feelings of resentment. If one considers the *social meaning* of the effort that is reflected in long hours, both effort-reward theory (Siegrist, 1996) and the SOS concept suggest that the *social meaning* of situations may change in a positive way when the effort shown is appropriately rewarded. In line with this argument, Van der Hulst and Geurts (2001) were able to show that the association between overtime and various health outcomes was drastically different for conditions of high versus low perceived rewards. Our results show a similar pattern when appreciation is employed as a moderator. Job satisfaction even increased with longer working hours under conditions of high appreciation. None of the other predictors interacted with hours worked. These results underline the fact that self-relevance, measured in terms of explicit and direct appreciation, is an important aspect of the rewards received.

Finally, mediation analysis showed that illegitimate tasks are associated with a lack of appreciation, which in

turn is associated with lower job satisfaction and more feelings of resentment. These results are important in several ways. First, they confirm previous findings that illegitimate tasks are associated with lower well-being (Semmer, Tschan et al., 2010). Second, they are in line with the assumption of the SOS concept that, by violating norms about what can reasonably be expected, illegitimate tasks constitute a threat to one's professional identity, and therefore the self (Semmer et al., 2007; Semmer, Tschan et al., 2010). This assumption implies that the mechanism connecting illegitimate tasks with well-being should be the experience of not being acknowledged and appreciated. This is exactly the mechanism suggested by our mediation analyses, which strengthens the arguments behind the SOS approach.

It may be especially noteworthy that the importance of appreciation could be confirmed in a sample of career officers. The stereotype of the military entails command and obedience and depicts military professionals as tough. Our results show that they appreciate appreciation as much as anyone else does.

Limitations and Future Directions

The findings of the present study need to be considered in the context of the study's limitations. First, the study is based exclusively on self-report, implying the danger of spurious results due to common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Controlling for a number of variables that are also based on self-report, such as interactional justice or social support, reduces this danger, as the common method variance is partialled out, too. Nevertheless, future studies should employ other measures as well (e.g., behavioural or physiological measures). Second, the study is cross-sectional and therefore does not allow causal interpretation. Hence, further studies should employ longitudinal designs as well as intraindividual (e.g., daily) measures. Third, the present study concentrates on two measures of strain, one more cognitive and one more affective. Future studies should consider other outcomes as well, for instance in terms of motivation, performance, promotion, etc. Fourth, further studies might also include appreciation by other sources, such as subordinates, or members of the public (see the recent finding that clients are a major source of appreciation at work; Jacobs-hagen & Semmer, 2009). Finally, individual differences, such as self-esteem (both in terms of level and in terms of stability) might be investigated.

Implications

Recent military research speaks of a trend reversal in military organisations. Developments since the fall of the Berlin Wall have effectuated not only reforms in organisation, but also changes in the role of the military profession (Moskos, 1992). Thus, an approximation to civilian structures

can be observed (Apelt, 2006; Segal & Wechsler Segal, 1983). Professionals are not viewed primarily as warriors anymore, but as peace or security managers with high social competence and diplomatic skills (Apelt, 2006). New challenges need new profiles (Haltiner, 2006). The depicted changes in circumstances seem to be a good basis for establishing a culture of appreciation at work. The findings of the present study imply that it is worth building an organisational culture based on appreciation since it is an effective as well as economical way to increase well-being. People-oriented leadership (Steiger, 1991), leadership style based on a moral dimension (Seiler, 2002), and performance appraisal focusing on social skills and personal values (Annen, 2000; Annen, Steiger, & Zwygart, 2004) are among the most important foundations of military behaviour and also of military training. The present empirical findings concerning appreciation at work may provide a valuable addition to previous practical experience and a solid foundation for specific training.

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