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ORIGINAL ARTICLE

Personality predicting military morale and the role of positive and negative affectivity

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BACKGROUND
Military morale is defined as the enthusiasm and persistence with which a member of the group engages in the prescribed activities of that group and is considered to be closely related to performance. The current study uses the conceptualization of military morale through the elements of work engagement and burnout. Nevertheless, our personality traits, and how we interpret or react to our environment, including group atmosphere, may also be related to perception of morale alongside positive and negative affectivity. The article investigates the relations between perceptions of morale, personality traits (the Big Five) and positive or negative affectivity in a military context.

PARTICIPANTS AND PROCEDURE
A sample of Estonian military conscripts (N = 354) from the soldiers' basic military training course responded to the questionnaire. Three measures were used for data collection: a short personality questionnaire (40 items) for Big Five personality traits; the Positive and Negative Affect Schedule (PANAS; 20 items) for state affectivity (both positive and negative); and a 16-item instrument for military morale (8 items for both work engagement and burnout). Structural equation modelling was used to evaluate relationships between study variables.

RESULTS
The results indicated that openness to experience and agreeableness did not have a significant effect on military morale (as work engagement and burnout) either directly or indirectly (through affectivity). However, conscientiousness was found to have a significant effect on military morale and extraversion indirectly through positive affectivity. Positive and negative affectivity as the mediators strengthened the relations between personality traits and military morale.

CONCLUSIONS
The results emphasize the reinforcing power of positive emotions to enhance high morale.

KEY WORDS
Big Five; Estonia; affectivity; conscription service; military morale

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BACKGROUND

Efficiency and effectiveness have been highlighted in several domains, including the military. Taking the individual perspective, we assume that an individual's personality traits, emotional state and military morale might be related to both individual and group efficiency in the military context. However, to what extent the person's tendency to assess their situations emotionally, as positive or negative appears pre-detectable, and how work-related emotional assessments could be explained by personal characteristics needs some clarification.

Military morale has been seen as one of the decisive components of military success (Ivey, 2014) and both individual and unit performance (Britt & Dickinson, 2006). One widely used definition of it was proposed by Manning (1991, p. 455): "the enthusiasm and persistence with which a member of a group engages in the prescribed activities of that group". Following Maslach and Leiter (1997) and Maslach et al. (2001), van Boxmeer et al. (2007) elaborated this notion of morale in a military context, conceptualising it through work engagement (WE) and burnout (BO). They argued that the elements of high military morale such as enthusiasm and persistence might be very similar to the key elements of WE. Firstly *vigour* as a high level of energy and mental resilience, the willingness to invest effort in one's work, and persistence even in the face of difficulties, and secondly *dedication* as a strong involvement in one's work and a sense of significance, enthusiasm, inspiration, pride and challenge (Schaufeli et al., 2002). On the other hand, the key elements of BO were conceptualized by *exhaustion* as the draining of mental energy and *cynicism* as a negative attitude toward work (Maslach et al., 2001). Both BO and WE have separately demonstrated positive or negative correlations (respectively) with performance (Christian et al., 2011; Demerouti & Cropanzano, 2010).

The current article follows the conceptualization of morale as a two-dimensional, yet correlated, individual level phenomenon which forms opposite poles (González-Romá et al., 2006): high morale (subsequently referred to as WE) and low morale (subsequently referred to as BO), which appears within the social (unit) context (van Boxmeer et al., 2007). It gives a service member energy, directing the person towards more qualitative performance in stressful conditions, and also enthusiasm and persistence with which a member of a unit engages in the prescribed activities of that unit (for instance a weapon team, squad or platoon). However, the question arises how other individual-level traits and emotional or attitudinal phenomena are related to it and how those relations are structured.

Personality has been seen as a dispositional agent that influences an individual's interpretations of and reactions to the environment (McCrae & Costa, 2008). Mischel and Shoda (2008) proposed their theory of the cognitive-affective personality system, arguing that personalities influence how individuals encode and evaluate information coming from their environment. Thus, while behaviour may still fluctuate, there is stability in how each individual's behaviour varies from one situation to another. A second construct reflecting situational relations of personality is an affectivity (especially state affectivity), which tends to make people evaluate their experiences through a negative or positive mood (Watson & Clark, 1992). To take the example of two service members from the same unit, having different levels of military morale: among other factors, this difference might exist due to their variances in personality traits, which could be reinforced by experienced emotions, moods and feelings over the period preceding this particular point of time. In other words, personality plays an important conceptual role in explaining the work-related variables (in our case military morale), but the way in which individuals interpret situational factors, affected by the positive or negative affectivity, could add an extra explanation.

Thus we were interested in the extent to which a person's stable personality traits and their emotional state (the positive or negative affectivity) describe military morale. This means: how does personality predict military morale and what is the role of positive and negative affectivity in it? By answering this question, we may discover the sources of service members' enthusiasm and engagement with their work-related activities and use this to develop interventions to promote high morale and subsequently work performance in military organizations.

PERSONALITY AND MILITARY MORALE

The five-factor model of personality has become one of the dominant paradigms in personality psychology (John et al., 2008). It describes personality through the way people perceive and interpret events, thoughts and feelings in their life (McCrae & Costa, 2008), including factors such as openness to experience (Ope), conscientiousness (Con), extraversion (Ext), agreeableness (Agr) and neuroticism (Neu) (Costa & McCrae, 1995). Individuals with high Ope are generally open to fantasy, aesthetics, feelings, actions, ideas and values; conscientious people are competent, orderly, dutiful, achievement striving, self-disciplined and deliberate; extraverted individuals are generally warm, gregarious, assertive, active, excitement-seeking and experience more positive emotions. Individuals high in Agr are generally trustworthy, straightforward, altruistic, compliant, modest and tender-minded; and neurotic

individuals are described as having a tendency to experience negative emotions such as anxiety, anger, and depression, as well as being impulsive and vulnerable (McCrae & Costa, 2008).

Like morale, personality traits have been found to be related to a variety of organizational variables (Gottlieb & Gøtzsche-Astrup, 2020), including positive correlations with task and contextual performance in the military context (Sinclair & Tucker, 2006). Despite this, the relations between personality and morale have not been widely studied. However, taking into account the conceptualization of it (as WE and BO) the results seem to be somehow controversial. Generally, WE has been found to be positively associated with Con and Ope (Akhtar et al., 2015; Inceoglu & Warr, 2011; Schaufeli, 2016; Woods & Sofat, 2013) and negatively with Neu (Inceoglu & Warr, 2011; Langelaan et al., 2006; Schaufeli, 2016; Woods & Sofat, 2013). Additionally, BO has been found to be positively associated with Neu (Kim et al., 2007; Langelaan et al., 2006) and negatively with Con and Agr (Alarcon et al., 2009; Kim et al., 2009; Sulea et al., 2015). At the same time, Ext and Agr have demonstrated mixed results in the relations with WE (positive or non-significant) (Akhtar et al., 2015; Inceoglu & Warr, 2011; Kim et al., 2007; Sulea et al., 2015; Woods & Sofat, 2013) and Ope and Ext with BO (negative or non-significant) (Kim et al., 2007; Swider & Zimmerman, 2010).

Based on these findings, it is reasonable to predict associations between military morale and personality traits, assuming that Big Five factors are correlated with WE and BO. Reflecting those relationships, we assumed the following hypotheses: high morale (WE) is positively correlated with Con, Ext, Agr and Ope (H1.1), and negatively with Neu (H1.2); additionally, low morale (BO) is negatively correlated with Con, Ext, Agr and Ope (H1.3), and positively with Neu (H1.4).

AFFECTIVITY, MILITARY MORALE AND PERSONALITY

Both negative and positive affectivity can be assessed as either a long-term trait or short-term state (Shockley et al., 2012; Watson & Naragon, 2009). This differentiation is based on the understanding that state affectivity refers mainly to situation-related emotions, moods and feelings, whereas trait affectivity is more stable and lasts over a longer period (Kaplan et al., 2009). In our analyses, we were more interested in the role of state affectivity on the military morale experienced by the soldiers. It consists of a broad range of mood states, including among others happiness, joyfulness, activeness, and determination as positive affectivity (PosA) and hostility, angriness, guiltiness, nervousness, and depression as negative affectivity (NegA) (Allik & Realo, 1997). Thus, negative affectivity describes the aspects of emotional experience which are related to tension or dissatisfaction (Rogers & Revelle, 1998), for instance becoming angry rather easily, being impulsive and ineffectiveness in coping styles (Eaton & Bradley, 2008). On the other hand, PosA reflects the existence of several pleasant emotions (Watson & Clark, 1992) and generally enhances the variety of positive outcomes of the organizational context (Carver & Scheier, 2003).

Thus, considering affectivity as a context-free characteristic (Schaufeli & Bakker, 2010) and military morale (WE & BO) as a domain-specific psychological state, we might predict that those constructs are distinct from each other, yet correlated. Several studies have found support for these arguments, for example Kahn et al. (2006) reported that PosA and NegA both were significant predictors of BO. In other words, a high level of NegA is positively related to depression and anxiety (Naragon & Watson, 2009), leading to the conclusion that life is not good (Lucas & Diener, 2009). At the same time, a high level of PosA is positively associated with job satisfaction and physical health (Naragon & Watson, 2009), leading to the opposite conclusion, that life is good (Lucas & Diener, 2009). Thus, considering military morale as well-being (Peterson et al., 2008) and the respondent's subjective perception about his/her life in the military, we might conclude that it is a balance between positive and negative emotions.

So, reflecting the relationships between affectivity and morale, we propose the following hypotheses: there is a positive correlation between PosA and high morale (WE) (H2.1) and negative correlation between PosA and low morale (BO) (H2.2); at the same time, there is a negative correlation between NegA and high morale (WE) (H2.3) and a positive correlation between NegA and low morale (BO) (H2.4).

Several studies have found relations between personality and affectivity (Costa & McCrae, 1992; Watson & Clark, 1992), for instance with Ext and Neu (Gray & Watson, 2002; Watson & Clark, 1992). A distinction between them has been made in relation to time, meaning that if there is a question of positive or negative feelings over a longer period, it would mainly reflect the personality trait of Ext or Neu (Watson & Clark, 1994). At the same time, personality has been argued to be an important predictor of affectivity (Hayes & Joseph, 2003); for example, DeNeve and Cooper (1998) concluded in their meta-analysis that Ext and Neu together accounted for 6% of the variance of PosA and 20% of NegA. To conclude, personality could be understood as basic tendencies which shape a person's "readiness" to experience different events of life through a positive or negative prism. Nevertheless, affectivity might add

an emotional component to this experience within a certain (shorter) time.

Bringing military morale into the discussion and based on the findings from Swider and Zimmerman (2010), Inceoglu and Warr (2011), we would argue that WE and BO might have a role in facilitating how personality and affectivity influence individuals' work behaviour. For instance, individuals high in PosA may have a variety of mental states, although the positive feelings dominate compared with individuals low on positive affect. Adding the personality, particular traits might increase or decrease the likelihood of experiencing a state of high or low morale in service. Thus, in addition to the correlations between personality and morale, and affectivity and morale hypothesized above, we also expect NegA and PosA to behave as mediators between personality and military morale. For instance, individuals high in Neu tend to have lower WE, although the impact of Neu might be stronger due to the tendency to see the world through the negative mood (Watson & Clark, 1992). At the same time, the impact of such personality traits as Ext and Agr might be enhanced by the positive feelings (PosA) related to the work environment, because individuals have a predisposition to experience the environment through optimism and cooperation (Clark & Watson, 1999).

Therefore we posited the following hypotheses: Agr and Ext predict WE (positively) and BO (negatively) when mediated by PosA (H3.1); and Neu predicts WE (negatively) and BO (positively) when mediated by NegA (H3.2).

All hypothesized effects between the study variables are presented in Figure 1.

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

A sample of 354 Estonian conscription service members participated in the study, with a mean age of 21.43 (*SD* = 1.60), min 18 and max 27 years; 350 of them were male and 4 female; 327 reported having Estonian as their mother tongue, 25 Russian and 2 both languages. Two participants had basic, 252 secondary, 56 higher education and 44 did not report their education.

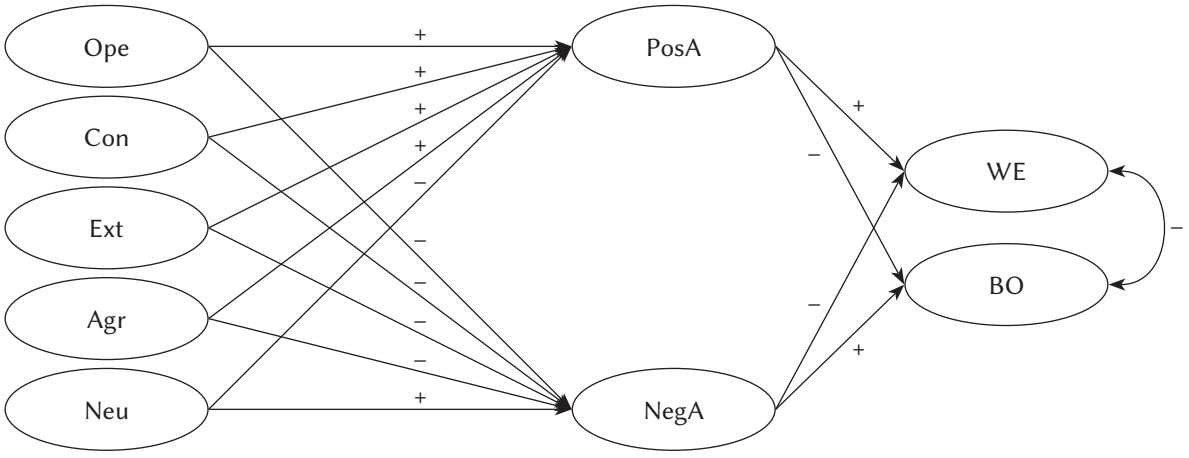
MEASURES

Military morale. Military morale was measured by a 16-item instrument derived from the concept of WE and BO (Schaufeli & Bakker, 2004), adopted for the military by van Boxmeer et al. (2007) and subsequently into the Estonian language by Parmak (2010). It consists of two dimensions, both with 8 items: 1) high morale (WE) (dedication and vigour), and 2) low morale (BO) (cynicism and exhaustion). A five-point Likert scale was used ranging from 1 (*never*) to 5 (*always*). Respondents assessed their current opinions and thoughts regarding their activities related to their conscription service. Confirmatory factor analyses (CFA) for the two-factor model showed a good fit to the data: $\chi^2(103) = 316.26$; RMSEA = .078; CFI = .96; TLI = .95 and SRMS = .073.

Personality. For personality, a 40-item Short Personality Questionnaire (SPQ-40; Parmak et al., 2013) measuring the Big Five personality traits (8 items per trait) was used. A five-point Likert scale was

Figure 1

Model with all hypothesized effects between the study variables



Note. Ope – openness; Con – conscientiousness; Ext – extraversion; Agr – agreeableness; Neu – neuroticism; PosA – positive affectivity; NegA – negative affectivity; WE – high morale/work engagement; BO – low morale/burnout.

used ranging from 0 (*strongly disagree*) to 4 (*strongly agree*) and the respondents rated to what extent the following 40 statements are specific for them. CFA for this instrument demonstrated a good fit to the data: $\chi^2(730) = 1545.16$; RMSEA = .056; CFI = .95; TLI = .94 and SRMS = .086.

Affectivity. Affectivity was measured by a 20-item instrument (Watson et al., 1988), adopted into the Estonian language by Allik and Realo (1997). Ten items asked about positive and ten items about negative emotions. A five-point Likert scale was used, ranging from 1 (*very little*) to 5 (*very high*) as respondents were asked to assess each expression and decide to what extent they have felt these emotions over the past few weeks. This guidance followed the recommendations given by the PANAS-X manual (Watson & Clark, 1994) in order to measure state affectivity. CFA for this instrument demonstrated a good fit to the data: $\chi^2(169) = 577.79$; RMSEA = .091; CFI = .96; TLI = .96 and SRMS = .073.

ETHICAL CONSIDERATIONS

Participants filled out the questionnaires in the classrooms at the end of respondents' basic military training using a paper-pencil approach. The explanation of the aim and objectives of the research was provided to them before questionnaire administration (informed consent). Also, the possible risk of taking part in the research, its duration and procedures were discussed. Participation was voluntary, and all respondents were allowed to interrupt their questionnaire any time they wanted. Data were collected in such a way that participants remained anonymous.

DATA ANALYSES

Variables were not normally distributed; therefore Spearman's rho (ρ) and robust diagonally weighted squares (method of model estimate for structural equation modelling [SEM by LISREL 8.80]) were used. Goodness of fit was judged via four fit indexes: the comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), and standardized root mean residual (SRMR). Additionally, the value of chi squared was reported. For TLI and CFI, values ≥ .90 were considered as an acceptable fit, while values ≤ .08 were considered acceptable for RMSEA and SRMR (Marsh et al., 2004). Three models were tested: 1) all personality traits simultaneously into military morale; 2) all personality traits and affectivity simultaneously into military morale; 3) all personality traits directly and indirectly (through PosA and NegA) into military morale to assess the mediation effect of the affectivity between the personality and military morale.

COMMON METHOD VARIANCE

As noted in the literature (Podsakoff et al., 2003) since data on all study constructs were collected from one source (individual soldiers) the results could possibly be biased by common method bias (CMB), which might deflate or inflate the effect sizes between the constructs. In our study, constructs were supposed to reflect the respondents' perception about themselves and their interaction with the surrounding environment. Thus, using the data taken from a single sample and the time gap between the administrations of the questionnaire was not reasonable due to the aim of the study. Nevertheless, the following steps and arguments were used in order to mitigate the risk and control the impact of the CMB on the results. Firstly, we followed procedural steps recommended by Podsakoff et al. (2012) and developed the questionnaire in such a way that the separation of the constructs was apparent. Each of them had a different scale wording, and additionally, the responses for personality items required answers from 0 to 4 to be different from the others. All items were rather short and clear, complicated and foreign words were avoided, and positively and negatively worded items were mixed. Secondly, despite the fact that the Harman single factor test was not recommended (Schwarz et al., 2017), it revealed that the extracted variance for the one factor solution was 19%, indicating no serious problem. Additionally, an unmeasured latent variable technique was applied (Podsakoff et al., 2003; Williams & McGonagle, 2016). Squared standardized regression weights showed a rather low tendency for the CMB ($\beta = .12 \longrightarrow \beta^2 = .01$), comparing standardized regression weights with and without an unmeasured common method latent factor. There was no indication of remarkable CMB ($\Delta\beta_{average} = .02$; min −.004, max .07). Additionally, the fit indexes for both models were not different; therefore adding the unmeasured common method latent factor into the model did not improve the model fit. Thus, the authors concluded that the effect of CMB on the study results was not significant.

RESULTS

DESCRIPTIVE STATISTICS AND CORRELATIONS

Descriptive statistics and correlations are shown in Table 1. In general, Cronbach's α values were in the range of accepted reliability figures (α > .70) as summarized by Furr and Bacharach (2014). No surprising correlations were found between personality and affectivity; they were comparable with the results published previously (Allik & Realo, 1997; Watson & Clark, 1992). The correlation between WE and BO was −.56 ($p < .001$), which is in line with Schaufeli

Table 1

Descriptive statistics and correlations (Spearman's rho)

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. WE (high morale)	3.30	0.51	(.83)								
2. BO (low morale)	2.83	0.60	−.56	(.77)							
3. Positive affect	3.02	0.72	.47	−.42	(.90)						
4. Negative affect	2.50	0.83	−.29	.42	−.43	(.92)					
5. Openness[1]	3.41	0.48	.18	−.18	.23	ns	(.75)				
6. Conscientiousness[1]	3.12	0.47	.36	−.30	.29	−.33	.14	(.77)			
7. Extraversion[1]	3.15	0.64	.28	−.27	.49	−.21	.31	ns	(.88)		
8. Agreeableness[1]	3.66	0.41	.23	−.13	.24	−.22	.24	.29	.15	(.80)	
9. Neuroticism[1]	2.19	0.57	−.28	.42	−.34	.56	−.22	−.35	−.17	−.30	(.87)

Note. $N = 347$; Cronbach's α values are in brackets; WE – work engagement; BO – burnout; ns – non-significant correlations ($p > .05$); [1] the original scale (0-4) was transformed into 1-5 in order to make comparisons with others clearer.

Table 2

Models' fit statistics

Model	χ^2 (*p*)	*df*	RMSEA	CFI	TLI	SRMR
Model 1A	2748.57 (< .001)	1463	.050	.95	.95	.080
Model 1B	4799.63 (< .001)	2738	.046	.96	.96	.074
Model 2	4837.11 (< .001)	2739	.047	.96	.96	.075

Note. Method: robust diagonally weighted squares; sample ($N = 354$); RMSEA – root mean square error of approximation; CFI – comparative fit index; TLI – non-normed fit index; SRMR – standardized root mean square residual. Model 1A: All personality traits were specified into WE and BO; covariation between WE and BO was allowed. Model 1B: All personality traits and affectivity were specified into WE and BO, covariation between WE and BO was allowed. Model 2: All personality traits were specified simultaneously into positive- and negative affectivity and into WE and BO; covariation between WE and BO was allowed.

and Bakker (2010), who stated that correlations between WE and BO are usually in the range of −.40 and −.60. PosA and NegA have demonstrated associations with WE and BO as predicted: WE positive with PosA (ρ = .47) and negative with NegA (ρ = −.29), and BO positive with NegA (ρ = .42) and negative with WE (ρ = −.42). In addition, personality and WE/BO showed correlations, as concluded by a literature overview.

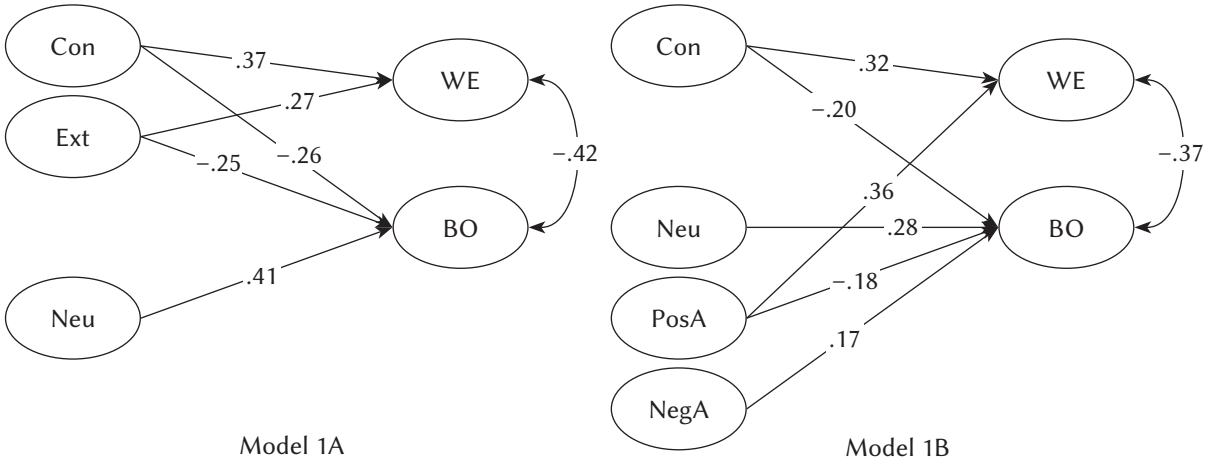
MODEL TESTING

In general, all models fitted the data well (Table 2), with fit indexes above the generally accepted cut-off values. Model 1A (personality predicting morale): Ope and Agr were not predictors ($p > .05$) of either WE or BO, while Neu predicted only BO. At the same time, Con and Ext showed relations as hypothesized; both predicted WE and BO (see Figure 2 and Table 3 for details). The model described approximately 31% of variance of WE and 40% of variance of BO. Adding PosA and NegA as direct predictors into the model (Model 1B) explained an additional 9% of WE and 5% of BO. Con and Neu maintained their predictive power compared with the previous model, whereas Ext lost it. In conclusion, affectivity weakened the relationships between personality traits and military morale.

Model 2 (personality predicting morale directly and indirectly through affectivity): Agr demonstrated non-significant paths, Ope predicted NegA, while all other paths remained non-significant (Figure 3 and Table 4 for details). With Con all paths remained significant, but Ext was significantly predictive for affectivity and non-significant for WE and BO. Additionally, the only significant path between affectivity and WE/BO was from PosA to WE. Thus when affectivity was added to the model as a mediator, the personality explained directly approximately 10% of the variance of WE (only Con) and 15% of BO (Con and Neu). Generally, this result indicated that personality traits predict military morale, and this relation is partially mediated by affectivity.

Figure 2

Models 1A and 1B with direct effects of personality and affectivity on work engagement (WE) and burnout (BO)



Note. Con – conscientiousness, Ext – extraversion, Neu – neuroticism, PosA – positive affectivity, NegA – negative affectivity, WE – high morale/work engagement, BO – low morale/burnout. Only statistically significant ($p < .05$) variables and standardized coefficients are presented in the diagram.

DISCUSSION

SUPPORT/REJECTION OF HYPOTHESES

In the current study, the influence of stable and distal variables such as personality traits on military morale was examined, discovering the possible mediating role of a state-like variable such as affectivity. The aim of the study was to find indications of personality traits predicting military morale using service personnel from the Estonian military.

The personality traits are said to be relatively stable, but military morale is a construct which fluctuates over time. In this argument, stable traits reflect long-term tendencies of conduct with a generalized influence on the ways people think, behave, and feel (McCrae & Costa, 2008). In the literature, several studies have reported that personality traits are distal variables influencing a variety of outcomes through the mediating motivational or state-like variables (Gottlieb & Gøtzsche-Astrup, 2020; Woods & Sofat, 2013).

Our first hypotheses concerned the relations between personality and military morale (conceptualized as work engagement and burnout; van Boxmeer et al., 2007). Looking at the correlations, we found that openness, conscientiousness, extraversion and agreeableness correlated statistically significantly with work engagement (H1.1) and negatively with burnout (H1.3), while at the same time neuroticism was negatively correlated with work engagement (H1.2) and positively with burnout (H1.4). These findings were generally in line with the results from previous studies (Inceoglu & Warr, 2011; Schaufeli, 2016; Woods & Sofat, 2013). However, path analysis (Model 1A) demonstrated that openness and agreeableness did not predict statistically significantly either work engagement or burnout and neuroticism predicted only burnout. Therefore, we could conclude that H1.1 and H1.3 were supported partially (confirmed for conscientiousness and extraversion and rejected for openness and agreeableness), H1.2 was not and H1.4 was supported.

Hypothesis 2 predicted relations between military morale and affectivity. Correlation analyses confirmed all of them (from H2.1 to H2.4). However, using path analyses (Model 1B) the paths between positive affectivity and military morale (both work engagement and burnout) were statistically significant, demonstrating the support for H2.1 and H2.2. At the same time the path analyses did not show a significant relation between negative affectivity and work engagement; thus H2.3 was not and H2.4 was supported by the results.

The third set of hypotheses predicted a mediation effect of affectivity between personality (specifically extraversion, agreeableness and neuroticism) and military morale. Path analyses (Model 2) revealed significant indirect effects only between conscientiousness, extraversion and neuroticism and work engagement (through positive affectivity). Thus, H3.1 was supported partially and H3.2 was not supported by the results.

GENERAL DISCUSSION

Firstly, openness did not demonstrate statistically significant prediction of military morale (as work engagement and burnout), but it had an impact on

Table 3

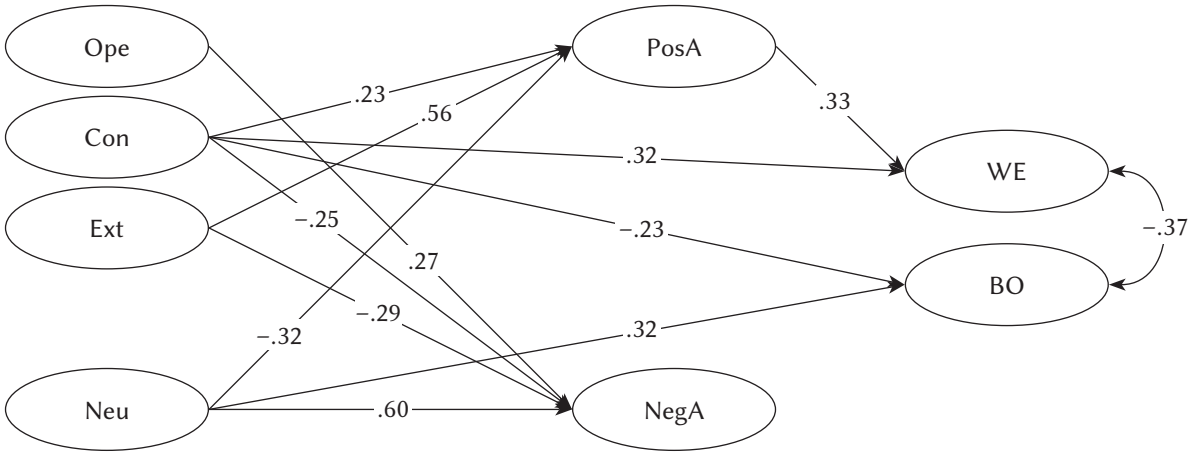
Comparison of effects between the models

	Model 1A		Model 1B	
	Work engagement	Burnout	Work engagement	Burnout
	Direct/total effect	Direct/total effect	Direct/total effect	Direct/total effect
Openness				
B (*SE*)	.04 (.20)	−.03 (.06)	.03 (.10)	−.05(.06)
t	0.19	−0.55	0.29	−0.83
p	.849	.582	.772	.407
β	.02	−.05	.02	.07
Conscientiousness				
B (*SE*)	.56 (.11)	−.12 (.04)	.42 (.09)	−.15 (.06)
t	5.27	−2.88	4.63	−2.46
p	< .001	.004	< .001	.014
β	.37	−.26	.32	−.20
Extraversion				
B (*SE*)	.36 (.09)	−.10 (.03)	.10 (.67)	−.08 (.05)
t	3.95	−2.96	1.53	−1.64
p	< .001	.003	.126	.101
β	.27	−.25	.10	−.13
Agreeableness				
B (*SE*)	.08 (.09)	.05 (.03)	.06 (.08)	.09 (.05)
t	0.90	1.70	0.73	1.87
p	.368	.089	.465	.062
β	.06	.14	.05	.14
Neuroticism				
B (*SE*)	−.18 (.14)	.23 (.05)	−.01 (.09)	−.17 (.05)
t	−1.30	4.25	−0.15	3.22
p	.194	< .001	.881	.001
β	−.10	.41	−.01	.28
Positive affectivity				
B (*SE*)	n/a	n/a	.41 (.08)	−.12 (.05)
t	n/a	n/a	5.11	−2.27
p	n/a	n/a	< .001	.023
β	n/a	n/a	.36	−.18
Negative affectivity				
B (*SE*)	n/a	n/a	−.01 (.08)	.10 (.04)
t	n/a	n/a	−0.14	2.17
p	n/a	n/a	.889	.030
β	n/a	n/a	−.01	.17
R^2	.31	.40	.40	.45

Note. n/a – not applicable.

Figure 3

Model 2 with indirect and direct effects of personality on work engagement (WE) and burnout (BO)



Note. Ope – openness, Con – conscientiousness, Ext – extraversion, Neu – neuroticism, NegA – negative affectivity, PosA – positive affectivity, WE – high morale/work engagement, BO – low morale/burnout. Only statistically significant ($p < .05$) variables and standardized coefficients are presented in the diagram.

negative affectivity. This result is opposite to that found in the literature (Akhtar et al., 2015; Schaufeli, 2016). It might be explained by the unique context of the participants in the study. Usually individuals high in openness are broadminded and willing to try new things (McCrae & Costa, 2008); however, an environment of compulsory military service is somehow restricted, especially for conscripts, so those individuals might feel negative emotions manifested in negative affectivity. Thus, this environment might limit the possibilities to employ those tendencies (for instance, intellectual interests) which are specific to individuals high in this particular trait.

Secondly, conscientiousness and extraversion predicted military morale (as work engagement and burnout), as indicated by the literature (Akhtar et al., 2015; Kim et al., 2009). However conscientiousness retained its predictive power in all models tested, whereas extraversion lost it when affectivity (especially positive affectivity) was added. Conscientious people are self-disciplined, and act dutifully and deliberately (McCrae & Costa, 2008). Therefore, we might assume that the military environment, which is quite structured with rules and regulations supposed to be followed strictly by service members, is suitable for individuals in whom this particular personality trait is prevalent. At the same time, extraversion refers to people's varying tendencies to be spontaneous and outgoing (McCrae & Costa, 2008). Despite the tendency of the military environment to be rather inflexibly structured, it might also give service members a possibility to experience new things and excitement, especially for those dealing with modern equipment, etc. To conclude, extraversion had a direct effect on both the negative and positive affectivity and an indirect effect on the positive side of military morale, so extraverts tend to experience more positive emotions (e.g. Gray & Watson, 2002) during their service, which subsequently leads to the feeling of high morale. It also could indicate that extraverts might have stronger coping mechanisms in order to deal with the unusual environment during their conscription service.

Thirdly, for all SEM models tested, agreeableness demonstrated no statistically significant prediction of military morale. This result contradicts a general tendency found from previous studies (Woods & Sofat, 2013). Agreeableness tends to reflect individuals' tendency to develop and maintain prosocial relationships (McCrae & Costa, 2008), and one might assume this would support, for instance, coping with a military environment, yet the results indicated no significant contribution explaining high and low military morale. In other words, individuals having a low or high score in agreeableness, valuing or not valuing the social relations, cooperation etc., do not necessarily feel themselves to be either cynical and exhausted (low morale) or dedicated and vigorous (high morale).

Fourthly, neuroticism generally did not predict high morale, but it predicted rather directly low morale, which is partly in accordance with the general tendency found from the literature (Kim et al., 2007). At the same time, neuroticism and negative affectivity were strongly related. As neurotic individuals tend to have negative emotional responses to challenges (McCrae & Costa, 2008), the results sound logical. Thus, service members high in neuroticism tend to experience emotions, during their service, that are more negative (also reported by Gray & Watson,

Table 4

Comparison of effects (model 2)

	Work engagement			Burnout		
	DE	IE	TE	DE	IE	TE
Openness						
B (*SE*)	.05 (.21)	−.14 (.10)	−.09 (.21)	−.02 (.07)	.04 (.03)	.02 (.07)
t	0.22	−1.36	−0.42	−0.29	1.64	0.30
p	.826	.174	.675	.772	.101	.764
β	.02	−.06	−.04	−.03	.06	.03
Conscientiousness						
B (*SE*)	.53 (.14)	.14 (.07)	.66 (.13)	−.11 (.05)	−.03 (.02)	−.15 (.05)
t	3.91	2.05	5.17	−2.37	−1.74	−.3.07
p	< .001	.040	< .001	.018	.082	.002
β	.32	.08	.40	−.23	−.07	−.30
Extraversion						
B (*SE*)	.15 (.12)	.25 (.08)	.40 (.10)	−.07 (.05)	−.05 (.03)	−.12 (.04)
t	1.30	3.01	4.06	−1.62	−1.83	−3.10
p	.194	.003	< .001	.105	.067	.002
β	.12	.19	.31	−.19	−.12	−.31
Agreeableness						
B (*SE*)	.06 (.09)	−.01 (.03)	.05 (.09)	.60 (.03)	.00 (.01)	.06 (.03)
t	0.67	−0.47	0.53	1.91	0.51	1.95
p	.503	.638	.596	.056	.610	.051
β	.05	−.01	.04	.15	.01	.16
Neuroticism						
B (*SE*)	−.01 (.21)	−.23 (.15)	−.24 (.15)	.19 (.07)	.07 (.04)	.26 (.06)
t	−0.07	−1.54	−1.68	2.80	1.73	4.31
p	.944	.124	.093	.005	.084	< .001
β	−.01	−.12	−.13	.32	.13	.45
Positive affectivity						
B (*SE*)	.48 (.13)	n/a	.48 (.13)	−.06 (.04)	n/a	−.06 (.04)
t	3.88	n/a	3.88	−1.57	n/a	−1.57
p	< .001	n/a	< .001	.117	n/a	.117
β	.33	n/a	.33	−.14	n/a	−.14
Negative affectivity						
B (*SE*)	−.03 (.12)	n/a	−.03 (.12)	.05 (.03)	n/a	.05 (.04)
t	−0.27	n/a	−0.26	1.44	n/a	1.44
p	.787	n/a	.795	.150	n/a	.150
β	−.03	n/a	−.03	.14	n/a	.14
R^2		.39			.45	

Note. n/a – not applicable; TE – total effect; IE – indirect effect; DE – direct effect.

2002; Watson & Clark, 1992). However, those negative emotions did not contribute significantly to experiencing high morale, but rather to low morale. Yet neurotic individuals feel less positive and more negative emotion and it supports the feeling of low military morale (as burnout).

Fifthly, positive affectivity reflects the prevalence of several pleasant emotions (Watson & Clark, 1992) and generally enhances the variety of positive outcomes of an organizational context (Carver & Scheier, 2003). Individuals high in negative affectivity become angry rather easily, they are impulsive, and their coping styles are often ineffective (Eaton & Bradley, 2008), so negative affectivity describes the aspects of emotional experience which are related to tension or dissatisfaction (Rogers & Revelle, 1998). The path diagrams revealed slightly different results from the correlation matrix, meaning that affectivity as a separate construct had a rather weak effect on military morale. Only the path from positive affectivity to work engagement, when personality was directly added as a predictor of work engagement and burnout, was statistically significant. However, openness, conscientiousness, extraversion and neuroticism were significantly related to negative affectivity, indicating that negative emotions are related to the personality. Analysing the mediation effect of positive affectivity on work engagement by each personality trait separately, we could infer that only conscientiousness and extraversion were mediated by positive affectivity, while neuroticism had a significant effect on positive affectivity but not on work engagement.

IMPLICATIONS FOR PRACTICE

Every modern organization strives not only towards better outcomes, but also towards diminishing negative effects related to staff such as burnout, stress or turnover, which would cause additional costs to organizations. On the other hand, the current study was driven by the desire to find arguments for preventive solutions to this problem by testing the suitability of the concept of military morale and its measurement instrument that may be used as tools for monitoring military morale over the period of service. Moreover, the results showed that prevailing negative emotions (negative affectivity) experienced by service members did not necessarily make a difference in perception of work engagement or burnout, but prevailing positive emotions may increase military morale. For leaders the practical conclusion might be that reinforcing the positive emotions is expected to have a greater impact on morale, and therefore better performance, than just avoiding negative ones.

Secondly, the conclusion that conscientiousness and extraversion are positive predictors and neuroticism is a negative predictor of morale, and consequently of performance, could be used as an argument to develop selection tools for military service. This means that despite the controversial results from the literature, indicating the positive relations between openness and agreeableness with military morale (as work engagement and burnout) those two personality traits seems to be have no or little impact on it.

LIMITATIONS

The first limitation of this study could be the composition of the sample, as noted already in the method section – the possible impact of single source data might influence the results of the study. However, some procedural and statistical remedies were used to mitigate this. Secondly, to understand the relations between personality and military morale more deeply, a longitudinal research design is encouraged. This might give a better overview of the mediating role of affectivity between personality and morale, especially when considering different stages of service.

CONCLUSIONS

This study researched the pattern of relations between personality traits, affectivity and military morale. Taking military morale as the enthusiasm and persistence with which service members engage in their unit goals, the study addressed the question of whether personality could predict military morale when mediated by positive or negative affectivity. The patterns of relations were studied, conceptualizing military morale as a combination of work engagement and burnout, personality as Big Five personality traits, and the emotions as positive and negative affectivity. Taking into account the nature of military service and the wider context described in the literature overview, the results were somewhat surprising. The study showed that openness and agreeableness did not have effects on military morale, neuroticism had a direct effect on burnout, extraversion had an indirect effect on work engagement and conscientiousness had direct and indirect effects on military morale when affectivity was added to the model as a mediator. Thus differences in military morale could be explained by differences in personality and the amount of positive emotions experienced before a certain time point. This knowledge helps us to understand the part of vocational psychology related to military morale and its interrelated and influencing constructs. Constructs such as personality and affectivity deserve researchers and practitioners' attention in order to understand their relations and concurrence, and therefore to help to reduce the impact

of burnout on individual and collective performance, and at the same time to reinforce high morale and consequently the positive outcomes of performance.

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