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Healthy, but are they Satisfied? Factors Associated with Job Satisfaction in Professional Soldiers of the Slovenian Armed Forces

Polona Selič*, Davorina Petek and Katja Pesjak

Department of Family Medicine, Faculty of Medicine, University of Ljubljana, Poljanski nasip 58, 1000 Ljubljana, Slovenia

Abstract

Aim: To identify factors associated with job satisfaction in professional soldiers of the Slovenian Armed Forces using demographic characteristics, burnout, personality traits, and health and working environment characteristics.

Method: 361 military personnel (317 male (87.8%), 44 female (12.2%)) participated in a cross-sectional study (80.6% response rate). Sample data was presented by frequency and percentage distribution for categorical variables, or by mean value and standard deviation for continuous variables. The Pearson correlation coefficient, the independent sample t-test and the one-way ANOVA were used for the univariate statistical comparison. Variables significantly related to job satisfaction were included in the multivariate linear regression. The linear model calculation included coefficient B, 95% confidence interval for B, Beta coefficient, and P value. Statistical analysis was performed with the SPSS 15.0 software. P value < 0.05 was marked as statistically significant.

Results: Emotional exhaustion negatively affected satisfaction with work (β =-0.20; p<0.05), supervision (β =-0.15; p<0.05), salary (β =-0.22; p<0.05) and promotion prospects (β =-0.15; p<0.05). Satisfaction with co-workers mostly showed different associations; there was a negative association between satisfaction with co-workers and female gender (β =-0.16; p<0.05) and depersonalization (β =-0.25; p<0.05) and positive association between satisfaction with co-workers additional training (β =0.11; p<0.05) and number of divorces (β =0.12; p<0.05). Most variation was associated with the organizational characteristics; individual traits and health were not proven to have an impact.

Conclusion: Emotional exhaustion, but not physical health or its assessment, is a good predictor of poor overall job satisfaction and most of its components.

Keywords: Job satisfaction; Military personnel; Professional burnout; Health

Introduction

Job satisfaction, described as satisfaction with specific life contexts, contributes to an overall satisfaction with life. There is a proven connection between them [1,2], a review of studies from 34 different countries found the correlation to be on average 0.44 [3], although the direction of the impact and the role of the two factors remains unclear [4-6]. The interpretation of satisfaction as a work-life balance was proposed by Kabanoff [7], using three potential models, i.e. flow-over (satisfaction in one area affects satisfaction elsewhere), compensation (lack of satisfaction in one area is offset elsewhere) and segmentation (satisfaction in one area is independent of the others). There was an attempt to upgrade Kabanoff's flow-over concept, to suggest that job satisfaction and life satisfaction influence each other only in those individuals who value work highly in their hierarchy of preferences [8]. At present there is ongoing discussion on the direction of the impact. Most studies confirm the flow-over model, presuming influence in both directions [1,9-12], which clearly demonstrates that job satisfaction is strongly associated with satisfaction with life.

There is increasing evidence that current trends in employment and working conditions greatly affect physical and mental health [13]. Some characteristics of the working environment are presumed to be significantly associated with health and stress levels, as well as with factors mitigating these effects [14]. A meta-analysis of 500 studies declared job satisfaction was the strongest impact factor on welfare and health; although the association was relatively low, it was positive and statistically significant [13].

In the field of occupational health, job satisfaction is the most

common factor of interest [15]. Recent findings have shown a decreasing degree of satisfaction with work over the last few decades [16,17]. This trend is expected to affect the health of employees. Several studies have described the relationship between work characteristics and employees' health, and have clearly indicated satisfaction with work to be an essential part of quality of life [18]. People who are satisfied with their work are mentally and physically healthier, and presumably live longer [13,18]. Most studies have confirmed that job satisfaction has a positive effect on health, and reduces absenteeism [19-22].

Job satisfaction or dissatisfaction is a result of an individual's position with regard to work, factors associated with work, and life in general; it is the result of different job attitudes [23]. According to Herzberg's two factor theory of motivation [24], two types of factor can be distinguished: motivators, which are mainly concerned with satisfaction, and hygiene factors, mainly concerned with dissatisfaction. Many researchers, despite some criticism, still differentiate between

*Corresponding author: Polona Selič, Department of Family Medicine, Faculty of Medicine, University of Ljubljana, Poljanski nasip 58, 1000 Ljubljana, Slovenia, Tel: 00386-14-386-915; Fax: 00386-14-386-910; E-mail: polona.selic@siol.net

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the "intrinsic" and "extrinsic" aspects of work related attitudes, and confirm the assumption of two independent dimensions, satisfaction and dissatisfaction [9,25]. It is generally agreed that job satisfaction derives from work, while discontent is attributed to the working environment.

Recent debates in the field of job satisfaction have dealt with the question of whether job satisfaction may be presumed as a global concept, or if it consists of facets of satisfaction with various aspects of work [26,27]. The issue of job satisfaction assessment and evaluation has also been taken into consideration, and has resulted in measures of job satisfaction development. One of the most widely used instruments, the Job Descriptive Index (JDI) has been in use in Slovenia for almost 20 years [28]. The usability and methodological appropriateness of this multilateral instrument has been studied, and its validity and reliability have been confirmed [15,29]. Several surveys regarding employee satisfaction have been conducted in Slovenia [30]. A national study on a representative sample, carried out in 2000, showed only below-average satisfaction with all aspects of job [31].

Since 2004, when Slovenia joined the North Atlantic Territorial Organization (NATO), the Slovenian Armed Forces have taken an active part in supporting international peace. Military jobs are known to be especially stressful due to the constant need to deal with critical and acutely stressful situations. In our previous studies, we have explored key psychological factors in members of the Slovenian Armed Forces, who reported poorer bio-psycho-social well-being and more burnout, and therefore had reduced working effectiveness and motivation [32]. The determinants of sick leave duration were also researched; longer sick leave duration was found in women soldiers and the respondents were less satisfied with their relationships with coworkers [33]. There are other psychological factors and external triggers, e.g. organizational and environmental influences, such as role stress, job involvement and job stress that emerge as important in association with well-being and job satisfaction [32]. These factors, however, have not been thoroughly examined in Slovenian military settings. The objective of the present analysis is to specifically determine the factors associated with job satisfaction in professional members of the Slovenian Armed Forces.

Methods

The study design addressed the question: Which factors affect job satisfaction in professional soldiers?

Participants

The professional Slovenian Army counted 5908 participants in the beginning of year 2008. All the soldiers billeted in barracks in the central area of Slovenia were invited to participate in the study; a total of 448 voluntarily agreed. Confidentiality was obtained by anonymous administration of questionnaires, which were coded and are archived in the Department of Family Medicine at the Faculty of Medicine.

According to the median value of sick leave, two groups of soldiers, healthy and sick (less healthy), were formed. Since we used anonymous questionnaires to ensure confidentiality, it was not possible to track personal sick leave certificates. However, we tested possible discrepancies between our sample and objective data on the number of days of sick leave in 2007 for the entire Armed Forces personnel. No significant differences were found between the objective and the self-reported data ($M_{obj} = 7.31$, $M_{sub} = 6.01$, t = -1.87; P = 0.062). A third group consisted of soldiers on a mission taking place in the Kosovo area. As a mission situation represents specific professional

circumstances and an increased level of stress, an excellent health status is obligatory for participation. This third group was separated from the first two so that the impact of extreme stressful circumstances (the mission situation) could be examined. The participants in this group completed their questionnaires at the same time as the other subjects, after completion of their mission.

When the questionnaires were reviewed, all those with missing data were excluded. Thereafter 361 subjects were included in the analysis (80.6% response rate); 121 (33.5%) marked as 'healthy', 124 (34.3%) marked as 'less healthy' and 116 soldiers (32.1%) 'working in mission circumstances'.

The study protocol was approved by the Ethics Commission of the Ministry of Health of Slovenia.

Instruments and measures

The instruments relevant to this study are the background questionnaire, the Maslach Burnout Inventory (MBI), the Job Descriptive Index (JDI) and the Eysenck Personality Scales. The reliability of the instruments was tested by Cronbach's alpha coefficients. Based on this, all instruments reached the recommended threshold of 0.7 [34].

The background questionnaire included demographical data (age, gender, education, marital status, number of children, number of deaths in the family in the past three years, number of divorces), data connected to work (years of service; promotion and additional training achieved while serving in Slovenian Army; opportunity to perform desired work; number of months spent working abroad), life problems for the past three years, and health problems during the same period of time. Participants rated their past health on a 5-point scale using a self-rated questionnaire (SRH). A 5-point rating scale for SRH consisted of: 1 - excellent, 2 - good, 3 - medium, 4 - poor, 5 - very poor. As part of the SRH questionnaire, participants also completed the Self-Rated Sick Leave Scale with reference to 2007. In accordance with traditional approaches [35], the respondents indicated how many days they had spent on sick leave due to illness in 2007. We believed that the respondents would not be able to precisely recollect the information from more than a year ago and would tend to choose an average number. Therefore, we decided to use categories of health-related absenteeism rather than inquire about a specific number of days of sick leave. These categories were: 1 - no sick leave (0 days); 2 - 1-5 days; 3 - 6-10 days; 4 - 11-30 days; 5 - 31-60 days; 6 - 61-90 days; 7 - over 90 days (long-term sick leave).

Burnout was measured by the Maslach Burnout Inventory (MBI) [36]. The MBI is used for the measurement of three burnout dimensions, i.e. emotional exhaustion (EE), depersonalization (D) and personal accomplishment (PA). Higher composite scores on the individual parts of the MBI determine higher EE, D, and PA; higher composite scores on the EE and D part, and a lower composite score on the PA part, determine a higher level of burnout. The reliability of all three dimensions of the MBI was high; Cronbach's α (EE) =0.905; (D) 0.702; (PA) 0.776.

The Job Descriptive Index (JDI) measures satisfaction with five aspects of work: the work itself, co-workers, supervision, salary and promotions (career prospects). Statements in the questionnaire are assessed with 3, 1 or 0 scores regarding to answers (YES /'don't know' /NO) [36]. Higher composite scores indicate a higher level of satisfaction. In Slovenia, JDI was standardized in 1978 [37] with a

split-half reliability coefficient of 0.803 (work), 0.926 (supervision), 0.919 (co-workers), 0.891 (salary) and 0.891 (career prospects). In our study, the reliability of all JDI components was adequate; Cronbach's α (work) =0.847; (supervision) 0.868; (coworkers) 0.916; (salary) 0.755; (promotion prospects) 0.775.

The Eysenck Personality Scales [38] measure three dimensions of personality: Extroversion/Introversion ((E) orientation towards the outside world), Neuroticism/Stability ((N) emotional stability) and Psychoticism/Socialisation ((P) tough-mindedness, non-conformity, inconsideration, recklessness, hostility, anger and impulsiveness); the Lie (L) scale is added. The Eysenck Personality Scales (EPS Adult) and EPQ Revised were adopted and validated in Slovenia for the second time in detail in 2003 [39], including a key for evaluation and obtaining reliability from 0.83 (P), through 0.83 (L-scale) and 0.84 (E) to 0.90 (N). In our study, adequate reliability was attained; Cronbach's α (P) =0.700; (L-scale) 0.777; (E) 0.819; (N) 0.838.

Statistical analysis

Sample data was presented by frequency and percentage distribution for categorical variables, or by mean value and standard deviation for continuous variables. The Pearson correlation coefficient, the independent sample t-test and the one-way ANOVA were used for the univariate statistical comparison. Variables significantly related to job satisfaction were included in the multivariate linear regression. The linear model calculation included T value, Beta coefficient, and P value. Results also included F value, degrees of freedom and the proportion of the variation in the dependent variable explained by the regression model (R^2). Linear regression analysis included 14 continuous variables and 8 dichotomous (dummy) variables. Kolmogorov-Smirnov normal distribution test was used to ensure justification of used statistical methods. Statistical analysis was performed with the SPSS 15.0 software. P value < 0.05 was marked as statistically significant.

Results

Sample by gender, education, health status, marital status, rank, age and years of service in the Slovenian

Armed forces

Table 1 presents the sample by gender, education, health status, marital status, rank, age and years of service in the Slovenian Armed Forces.

Of 361 participants, 317 (87.8%) were men, which is comparable to the total Slovenian Armed Forces population (86.2% men). There was no statistically significant difference in age between men (30.85 ± 7.81) and women (31.18 ± 7.23) in the sample (p=0.791); the average age was 30.90 ± 7.70 years. However, when divided into three groups (status: healthy, less healthy and healthy, working in mission circumstances), there was a statistically significant difference in age (p<0.001) – the less healthy soldiers being the oldest (32.06 \pm 7.90), the soldiers on missions the youngest (28.49 \pm 5.11) and the healthy soldiers in between (31.99 \pm 9.06). Another statistically significant difference was found in the age of Privates (26.50±3.93), as compared to Non-Commissioned Officers (NCOs) (37.10 ± 7.34) and Officers (38.57 ± 7.16) (p<0.001). The share of Privates in the sample was larger and the share of Officers was smaller, conforming to the army population (Privates: 60.4% vs. 47.2% in the population; NCOs: 26.6% vs. 30.0%; and Officers: 13.0% vs. 22.8%) [33]. A total of 56.2% of the participants were married. They

Characteristic	n=361
Gender (%)	
male	317 (87.8)
female	44 (12.2)
Level of education (%)	
vocational school	71 (19.7)
high school	225 (62.3)
college	7 (1.9)
university and higher	58 (16.1)
Status (%)	
healthy	121 (33.5)
PH	124 (34.3)
Mission	116 (32.1)
Marital status (%)	
married/	203 (56.2)
single	158 (43.8)
Rank	
private	218 (60.4)
NCO	96 (26.6)
officer	47 (13.0)
Age (years) (M±SD)	30.90 ± 7.70 [19-59]
Years of service (M±SD)	9.30 ± 5.50 [3-24]

Abbreviations: PH: Less healthy, soldiers with poorer health; Mission: Healthy/ mission circumstances; NCO: non-commissioned officer.

 Table 1: Sample by Gender, Education, Health Status, Marital Status, Rank, Age and Years of Service in the Slovenian Armed Forces.

had served in the Slovenian Armed Forces from 3 to 24 years (9.30 \pm 5.50).

Overall job satisfaction: a linear regression model

Table 2 presents a linear regression model of overall job satisfaction and its associations. Kolmogorov-Smirnov normal distribution test was performed (JDI total: 177.80 \pm 50.15 (p=0.141) and the result justified modeling process (P \geq 0.05 represents normal distribution).

Satisfaction with job (JDI total) was associated with the opportunity to perform a desired job, and promotions and additional training achieved during service in the Armed Forces, especially in NCOs and officers. On the other hand, EE had a negative influence on overall job satisfaction. The linear regression model explained 43.5% of total variance in the overall job satisfaction.

Job satisfaction and its components: satisfaction with work, supervision, co-workers, salary and promotion: a linear regression model

Table 3 presents the components of job satisfaction: satisfaction with work, supervision, co-workers, salary and promotion.

Kolmogorov-Smirnov normal distribution test (JDI–work: 41.20 \pm 12.94 (p=0.102); JDI–supervision: 54.17 \pm 21.47 (p=0.073); JDI–co-workers: 57.01 \pm 16.20 (p=0.126); JDI–salary: 10.94 \pm 3.34 (p=0.152); JDI– career prospects: 14.47 \pm 5.59 (p=0.102) justified modeling process (P \geq 0.05 indicates normal distribution).

The linear model showed EE to have the greatest negative association

	description	distribution test#	Job Descriptive Index (JDI) total (F=14.209, df=21)**		
Characteristic			t	Beta	
PH	0-no, 1-yes		-1.30	-0.06	
Mission	0-no, 1-yes		-1.92	-0.11	
Marital status	1-married, 2-single		0.71	0.04	
Education	5.14 ± 0.92	0.257	0.82	0.04	
Gender	1-male, 2-female		-1.38	-0.06	
Age (yrs)	30.90 ± 7.70	0.144	0.27	0.02	
P	6.27 ± 1.57	0.096	-0.92	-0.05	
E	17.07 ± 3.17	0.259	1.01	0.05	
N	5.97 ± 2.42	0.121	1.22	0.06	
L	11.83 ± 3.85	0.069	1.64	0.07	
EE	16.3 ± 4.76	0.219	-3.08	-0.20*	
D	8.64 ± 3.28	0.111	-1.55	-0.10	
PA	30.70 ± 7.51	0.234	1.55	0.07	
Training	0-no, 1-yes		2.72	0.12*	
Work	0-no, 1-yes		5.39	0.24**	
Promotion	0-no, 1-yes		3.73	0.16**	
Parenting	0.63 ± 0.28	0.089	-0.96	-0.06	
Divorce	0.10 ± 0.04	0.093	-0.27	-0.01	
Loss	0.45 ± 0.16	0.128	-1.23	-0.05	
Abroad	3.48 ± 1.78	0.057	-0.90	-0.04	
NCO or officer	1-private, 2-NCO or officer		2.26	0.15*	
			R ² =0.435		

** p<0.001

* p<0.05;

Kolmogorov-Smirnov normal distribution test (P≥0.05 represents normal distribution)

JDI total: 177.80±50.15 (p=0.141) #

Abbreviations: PH: Less healthy, soldiers with poorer health; Mission: Healthy/mission circumstances; Education: Level of education; yrs: years; P: Psychoticism; E: Extroversion; N: Neuroticism; L: Lie scale; EE: Emotional exhaustion; D: Depersonalization; PA: Personal accomplishment; Training: Additional training achieved; Work: Performing desirable work; Promotion: Promotion achieved; Divorce: Number of divorces; Loss: Number of deaths in the family; Abroad: Working abroad (months)

Table 2: Satisfaction with Job (JDI total), A Linear Regression Model.

with job satisfaction and its components, such as work, supervision, salary, job and promotion prospects. On the other hand, performing desirable work tasks was positively correlated with satisfaction with supervision, promotion prospects and with the work. Similarly, achieving additional training during service in the Slovenian Armed Forces positively correlated with satisfaction with work, supervision and co-workers. Satisfaction with work and satisfaction with leadership (supervision) were correlated with almost the same psychosocial characteristics (EE, desired work, additional training during service and rank (NCO or officer)). The only exception was a negative association between parenting (number of children varied from 0 to 4, M=0.63 \pm 0.28) and satisfaction with work. The opportunity to perform desirable work, together with additional training in the past, rank (NCOs and officers), absence of EE and no children, accounted for 42.3% of the total variance in satisfaction with work in linear regression, while performing desirable work, additional training achieved in the past, rank (NCOs and officers) and absence of EE explained 32.5% of total variance in satisfaction with supervision in linear regression.

Satisfaction with salary and promotion prospects was correlated with the same three characteristics: EE, achieved promotion and higher level of education. Apart from these three, satisfaction with

salary was positively correlated with age, while satisfaction with career prospects positively correlated with performing desirable work and single marital status, and negatively with months spent working abroad. Achieving promotion, performing desirable work and having a higher level of education, together with single marital status, absence of EE and working mainly in their homeland, explained 31.9% of the total variance of satisfaction with career prospects in the linear regression model. Mature age, achieving promotion, level of education and absence of EE together accounted for 22.2% of total variance of satisfaction with salary in linear regression. There was a negative association between satisfaction with co-workers, female gender and D, and a positive association between the satisfaction with co-workers, achieving additional training and number of divorces. The number of divorces covered all failure of intimate relationships during adulthood (including non-formalized relationships) and varied from 0 to 6 (M=0.10 \pm 0.04). Apart from achieving additional training, the female gender, D and the number of divorces formed a different pattern, in comparison to the characteristics correlated with satisfaction with work, supervision, and salary and promotion prospects. 28.2% of the total variance in satisfaction with co-workers was explained by these characteristics in the linear regression model.

EE negatively affected all the components of job satisfaction, apart from satisfaction with co-workers. On the other hand, a desirable job and achieving additional training positively affected three components each, while promotion achieved in the past and rank (NCO and officer) had a positive impact on two components each.

Discussion

We identified the factors associated with job satisfaction in professional soldiers of the Slovenian Army. Possible associations and effects of demographic and psycho-social factors on job satisfaction overall (Table 2), as well as on its sub-dimensions (i.e. the work itself, supervision, co-workers, salary and promotion prospects) were tested (Table 3). Linear modeling procedures were used to partition the variance in a wide variety of indicators of participants' experiences. Most variation was in fact associated with organizational characteristics, while individual (personal) traits and health were not proven to have a significant impact. The results (Table 2) showed a negative association between overall job satisfaction and EE, as well as the negative impact of EE on satisfaction with work, supervision, salary and career prospects (Table 3). Therefore EE, caused by subjects being confronted with excessive demands in the course of their work, may be considered a good predictor of poor job satisfaction. Feelings of overwork and exhaustion are responses to a frequent state of heightened arousal, and a consequence of demands deriving from work. In our previous study, we analyzed basic personality traits and coping strategies in relation to health and burnout among members of Slovenian Armed Forces, and found one distinctive key factor between healthy and less healthy people, i.e. burnout [32].

A strong connection between job satisfaction and burnout syndrome was also reported by Faragher et al. [13]. In their metaanalysis, job satisfaction was associated with other mental health characteristics, i.e. depression, anxiety, self-esteem and mental health in general. It is also worth mentioning the weaker connection between an individual's subjective experience (assessment) and physical illnesses. No such connection was found in our analysis. The characteristics

	JDI – work	JDI – work F=11.833**		JDI – supervision F=7.756**		JDI – co-workers F=6.324**		JDI – salary F=4.618**		JDI – career prospects F=7.568**	
Characteristic	t	Beta	t	Beta	t	Beta	t	Beta	t	Beta	
РН	-1.15	-0.06	-1.52	-0.08	-0.63	-0.04	-0.41	-0.02	0.27	0.02	
Mission	-1.32	-0.08	-1.53	-0.10	-1.66	-0.11	-0.16	-0.01	-0.70	-0.04	
Marital status - single	0.21	0.01	0.03	0.00	-0.36	-0.02	1.04	0.06	2.38	0.13*	
Education	0.22	0.01	-1.02	-0.06	-0.20	-0.01	2.31	0.13*	3.64	0.20**	
Female gender	-1.12	-0.05	0.65	0.03	-3.24	-0.16*	0.40	0.02	-1.09	-0.05	
Age (yrs)	1.13	0.08	-0.45	-0.04	0.44	0.04	2.37	0.20*	-1.91	-0.15	
Р	-0.08	-0.00	-1.70	-0.10	-0.80	-0.05	1.68	0.10	-0.43	-0.02	
E	1.91	0.10	-0.68	-0.04	1.76	0.10	0.20	0.01	0.56	0.03	
Ν	0.90	0.05	1.69	0.10	-0.65	-0.04	1.12	0.07	0.72	0.04	
L	1.83	0.09	1.63	0.08	0.94	0.05	0.84	0.04	-0.69	-0.03	
EE	-2.77	-0.19*	-2.69	-0.19*	0.10	0.01	-2.83	-0.22*	-2.02	-0.15*	
D	-0.80	-0.05	-0.44	-0.03	-3.31	-0.25*	-0.07	-0.01	0.57	0.04	
PA	1.56	0.08	0.48	0.03	1.60	0.09	0.77	0.04	0.58	0.03	
Training	2.32	0.10*	2.71	0.13*	2.17	0.11*	-0.62	-0.03	0.34	0.02	
Work	6.42	0.30**	3.71	0.19**	1.76	0.09	1.29	0.07	3.89	0.20**	
Promotion	1.49	0.07	1.45	0.07	1.28	0.06	3.02	0.16*	6.41	0.31**	
Parenting	-2.14	-0.13*	-0.20	-0.01	-0.92	-0.06	0.62	0.05	-0.29	-0.02	
Divorce	0.76	0.04	-1.58	-0.08	2.28	0.12*	-1.24	-0.07	-1.30	-0.06	
Loss	0.21	0.01	-0.98	-0.05	-1.23	-0.06	0.02	0.00	-1.48	-0.07	
Abroad	-0.78	-0.04	0.45	0.02	-1.03	-0.06	-0.22	-0.01	-2.00	-0.11*	
NCO or officer	2.83	0.20*	3.06	0.23*	-0.26	-0.02	0.90	0.07	-0.34	-0.03	
	R ² =0.423		R ² =0.325**		R ² =0.281		R ² =0.222		R ² =0.319		

** p<0.001 * p<0.05 df=21

Kolmogorov-Smirnov normal distribution test (P≥0.05 indicates normal distribution)

JDI – work: 41.20±12.94 (p=0.102)

JDI - supervision: 54.17±21.47 (p=0.073)

JDI - co-workers: 57.01±16.20 (p=0.126)

JDI – salary: 10.94±3.34 (p=0.152)

JDI - career prospects: 14.47±5.59 (p=0.102)

Abbreviations: PH: Less healthy, soldiers with poorer health; Mission: Healthy/mission circumstances; Education: Level of education; yrs: years; P: Psychoticism; E: Extroversion; N: Neuroticism; L: Lie scale; EE: Emotional exhaustion; D: Depersonalization; PA: Personal accomplishment; Training: Additional training achieved; Work: Performing desirable work; Promotion: Promotion achieved; Divorce: Number of divorces; Loss: Number of deaths in the family; Abroad: Working abroad (months)

Table 3: Components of Job Satisfaction: Satisfaction with Work, Supervision, Co-workers, Salary and Promotion, A Linear Regression Model.

of participants (were younger adults, employed and in most cases with similar education) were in favor of high self-rated health. Good health is also a prerequisite for professional soldiers. In young people, transient poor medical conditions do not affect health self-assessment [33]. Since less healthy status of participants did not affect overall job satisfaction (Table 2) or its components (Table 3), it can therefore be concluded that physical health or its assessment has no influence on job satisfaction. Faragher et al. [13] showed a clear association between satisfaction with work and mental health. In general, employees with a lower level of satisfaction with work were more prone to burnout, had a reduced self-esteem and increased rates of anxiety and depression. This confirms the assumption that the lack of satisfaction in the workplace is a risk factor for the mental health and welfare of workers. On the other hand, the connection with physical health is not particularly marked. In our study, it is nonexistent.

A lower satisfaction with salary (Table 3) and career prospects in comparison to other data gathered in Slovenia [36] could be attributed to the fact that our sample consisted of subjects in their early thirties (M=30.90±7.70). It has been found that employees in Slovenia are mostly satisfied with their relationships with colleagues and continuity of employment, but are dissatisfied with salary and promotion opportunities [30]. A high overall satisfaction was found in young workers, with a tendency to decline during the first five years of employment, reaching the lowest point during the late twenties and early thirties [40]. Other data showed general job satisfaction increasing with age [41]. This was not confirmed in our analysis (Table 2), although there was a positive association between age and satisfaction with salary (Table 3). We assume that over the years people become more satisfied with their lives (or perhaps more realistic), working lives included. Mature people are often perceived to have fewer employment opportunities and alternatives and can therefore reconcile themselves to their work situation [42]. In the present study, soldiers with more years of service are most probably ranked higher, better paid and cherish the security of the Armed Forces.

Unexpectedly, there was a negative association between parenting and satisfaction with work (Table 3), meaning that subjects without children were prone to be more satisfied with their jobs. However, other data indicated that picture is not as simple as it seems. Since Privates were childless in 87.7% of subjects, which is reasonable since they were younger, and subjects who had served in the Armed Forces for longer had more children, there was apparently a group of NCOs and officers without children who were more satisfied with work overall (Table 2) and with work itself (Table 3).

Satisfaction with salary and promotion prospects were partly influenced by the same characteristics (Table 3): EE, achieved promotion and higher level of education, which are expected associations. According to state regulations, public servants` (including soldiers) salaries and promotions are mainly based upon educational level. In our analysis, this was supported by a positive association between satisfaction with salary and age, since years of service in the public domain is another factor affecting income. However, the percentage of variance explained was the lowest on the sub-dimension satisfaction with salary. Although the specific role of personal income has been frequently studied, there is surprisingly little known about the interaction between income and other factors influencing people's behavior at work. Promotion prospects or security are to be ranked over income [43]. In our case, the Armed Forces offer plenty of opportunity to achieve a higher level of education and consequently promotion, as well to provide secure jobs with permanent contracts. We found a positive association between age and satisfaction with salary (Table 3), but it did not contribute to overall job satisfaction (Table 2).

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Managing satisfaction with co-workers obviously calls for measures different from those managing other components of job satisfaction, since female gender, D and number of divorces formed a specific pattern of factors of influence (Table 3). As providing additional training for members of the Slovenian Armed Forces may be beneficial for satisfaction with the work itself and also with supervision, other characteristics should be brought into focus in connection with satisfaction with co-workers. Evidently, male gender, absence of D and number of divorces contributed to this component. Therefore, those most satisfied with coworkers were male subjects with possible difficulties maintaining intimate relationships, who were sympathetic, respectful and not cynical towards others.

Guided by numerous other studies [40,44,45], the association between personality and job satisfaction was examined. However, we found no impact of personal traits on job satisfaction (JDI total). Since we measured job satisfaction (and not dissatisfaction), the lack of impact of personality traits on job satisfaction did not necessarily prove their connection with dissatisfaction. Inspired by recent studies, which indicate that emotional stability is a factor most often associated with job satisfaction [46], we expected to show a connection, but did not. In any case, (subjective) satisfaction, whether it be with life or work, is by definition one of the most important criteria of psychological adaptation, and therefore mental health in its broadest sense. It would merit discussion whether the selection criteria in the Slovenian Armed Forces excluded people who adapt poorly, or whether the regime within the Armed Forces encourages constructive adaptation mechanisms. On the other hand, dissatisfaction is not compatible with the mental well-being and health which are tested during the recruitment process for the Slovenian Armed Forces, although it may appear thereafter.

The main sources of overall job satisfaction in the study might be described as those connected to the role of a soldier, military structures and organization (performing a desirable job), including advancement opportunities. Although almost half the total variance was explained in job satisfaction, more variables should be analyzed in future research to expand the explained variance, especially to reveal as yet unrecognized determinants of satisfaction with income and co-workers.

Given the relationship between perceptions of health and perceptions of work, satisfaction with supervision and opportunities for promotion were not predictive of health-perception measures [47]. We showed that physical health or its assessment had no influence in identifying predictors of job satisfaction (Table 2,3). Examining the prevalence of subjective health complaints among satisfied and dissatisfied workers in Norway, researchers [48] revealed that satisfied workers reported an average of five to six subjective health complaints, corresponding to the incidence found in the general population. Work environment explained 43% of the variance for job satisfaction and 9% of the variance in subjective health complaints, and had only a limited influence on this health indicator.

The characteristics of supervision, company policy and work procedures, as well as job control and job attitudes, need to be studied thoroughly in the future. Performing desirable work tasks appeared to be of similar importance to achieving additional training (Table 2,3). While the latter can contribute to a sense of control over someone's job, the former might be connected to challenge and excitement seeking in professional soldiers. Challenge is an important aspect of both job satisfaction and job burnout [49]. Being presented with challenges on the job is generally accepted to enhance job satisfaction and reduce burnout for most employees.

Since commitment might appear as a link between burnout and working conditions, commitment in professional soldiers of the Slovenian Armed Forces should be further focus of research interest.

Limitations

The cross-sectional survey design is inherently limited and, together with reliance on self-reported data, raises questions about the potential for method variance (i.e. same-source measurement bias) to account for our findings. Although the phenomenon being studied could have been assessed only by asking respondents to report an internal state or perception, it would be useful in further research design for some measures to be incorporated (e.g. medical records to obtain exact health and sick leave related data etc.) and measured over time (prospective study), to mitigate the potential effects of method variance.

In the study, the job demands and stress of the soldiers on a mission and non-deployed soldiers of the Slovenian Armed Forces performing routine military work were not controlled. Due to the structure of the sample in comparison with the whole Armed Forces, the conclusions made are more valid to Privates than NCOs and Officers.

Conclusions

Summarizing the factors related to job satisfaction and its components, we propose targeted measures, considering the intensity and quantity of the job's demands, to be taken in the Slovenian Armed Forces to prevent EE and consequently increase job satisfaction. Furthermore, proper career management should meet the preferences of as many professional soldiers as possible and provide job tasks as desired. Additional training within the Armed Forces should be provided as desired by the soldiers. Fulfillment of career aspirations may also be achieved by promotion to a higher rank.

Finally, the further need to focus on the interaction between personal and contextual factors in order to make advances in understanding job satisfaction should be emphasized. Satisfaction with work, supervision, and salary and promotion prospects should be achieved by different measures than satisfaction with co-workers, bearing in mind that special attention should be awarded to women soldiers when planning supervision, work procedures, and the gender equality policy of the Armed Forces.

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