

## **COPING WITH- STRESS DURING MILITARY BASIC TRAINING**

Vesna Buško, Alija Kulenović

Department of Psychology, Faculty of Philosophy, University of Zagreb

### **ABSTRACT**

*Within the stress and coping theoretical framework the study examines how concepts experience, appraise and deal with various aspects of life during the 'beginning phase of their military service. A set of self-report instruments measuring potential sources of problems during military service, cognitive appraisals and the ways of coping with stressors was administered on the sample of 449 males within first 7-12 days of their service and taken again in the same sample of recruits five weeks later, i. e. the last "but one week of their military basic training. Specific sources of problems cited by participants as more or less stressful showed to be relatively similar in two measurement points, although the rank of item average values varied to some extent from the very beginning to the final weeks of basic training. The results point to moderately high level of stress intensity and generally low level of perceived controllability of selected categories of situation reported by conscripts. The study showed that active adjusting and passivity were the most frequently used modes of coping followed by reinterpretation, humor and seeking social support, whereas the least frequently used strategies were expression of emotions and negotiation. Small, but significant changes were observed, as in cognitive appraisals so in the ways of coping with selected stressful situations encountered by recruits during basic training.*

The findings to be presented in this paper are a part of a larger research project<sup>2</sup> aimed at testing the hypotheses derived from the stress and coping theory by Lazarus and colleagues (Lazarus, 1991, 1993; Lazarus & Folkman, 1984, 1987) as applied to the military service context. As numerous empirical data indicate, entering into army and obligatory military service can be rather demanding for recruits, in terms of both physical and psychological requirements placed on the trainees (e.g., Clemons, 1996; Mikulincer & Florian, 1995; Vickers, Kolar & Hervig, 1989). Empirical evidence further suggests that military environment can be particularly stressful in the initial phase of service, that is, during the basic military training period (e.g., Maysless & Hai, 1998; Mehlum, 1998).

Using the stress and coping theoretical framework, this study thus sought to examine how conscripts experience, appraise and deal with various aspects of life during first two months of their service, i.e., in the course of basic military training. Aside from being theoretically interesting, better understanding of the dynamics and change in the processes of appraisals and coping with specific sources of stress during military can, of course, be valuable from the practical or applied standpoint. The findings are thus expected to be potentially useful in fostering the processes of adjustment to the military environment and improving the training process and performance of recruits in a variety of stressful situations.

As is well known, the theory views processes of appraisals and coping as critical mediators of unfavorable person-environment relationship and various immediate and long-term outcomes. According to authors, *cognitive appraisals* include processes in which people constantly evaluate the significance of what is happening to their personal well-being, whereas *coping* is defined as a person's ongoing efforts in thought and action to manage specific demands appraised as taxing or overwhelming (Lazarus, 1993). The dynamics of adaptation is seen as an unfolding process of causal antecedents (i.e., individual resources and environmental factors), mediators, and effects (psychological, physiological, and behavioral criteria of adjustment).

The present paper was conceived as a preliminary report on some descriptive data on the measures of central constructs of the theory - cognitive appraisals of stressful situations and coping strategies employed by conscripts, as well as changes in their reported level in the course of military basic training.

## METHOD

### Sample and procedure

The study was conducted in two time points on a sample of males attending military basic training at the Centre of 'Muzil' in Pula, Croatia. 449 recruits participated in the first part of the study which was completed at the very beginning of their military service, i.e. within 7-12 days of their stay in the Centre. Average age of participants was 21 years (SD=2.59), and the dominant education level was complete secondary school (78%). The sole criterion for the selection of subjects was the basic literacy. Out of the total sample, 421 recruits (93.8%) took part in the follow-up 5 weeks later, i.e. in the last but one week of their military basic training. A selected set of instruments was administered in groups of 60-80 subjects. Data gathering procedure was identical in the two measurement points and lasted approximately 90 minutes per group including a short pause.

### Instruments

*Sources of stress.* 43-item self-report **Problem scale** was designed to measure the incidence and the intensity of specific sources of problems during military service. Each item was assessed on a 4-point scale (1 = not at all a problem; 4 = bothers me a lot). In addition, to examine the content of stressful events we administered a list of potential stressors classified into following 6 categories: housing, relationships with other recruits, military regime, relationships with superordinates, disconnection of civilian life, and unclear situations during military service. Subjects were to choose one of the six thoroughly described **categories of**

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<sup>2</sup> The research project entitled 'Sources of stress, coping, and adjustment of recruits during military service' is being conducted by the Department of Psychology, University of Zagreb in collaboration with the Department of Military Psychology, MORH.

**problems** appraised as most stressful during military service, or within the last week, respectively.

*Cognitive appraisals.* Primary appraisal was defined as the perception of **stress intensity** with reference to the selected category of problems (on a scale from 0 = didn't make me upset at all, to 3 = it disturbed me very much), **suddenness** of the events (0 = not surprised at all, to 3 - I was totally surprised), as well as the appraisals of **loss**, **threat** and **challenge**, measured by the scales of emotions (with the total range of 0-3 each). Secondary appraisal was defined as the **perception of controllability** of selected category of problems, and assessed by two 4-point scales related to perceived impact on the **occurrence** as well as the **outcome** of stressful event (0 = no impact, 3 = thorough).

*Coping.* We administered an inventory containing 11 situation-specific 4-item coping scales measuring: **Negotiation** ( $\alpha_1=.42$ ;  $\alpha_2=.57$ ) - including active strategies directed to other persons related to the problem; asking for advice, but also confronting; **Planning** ( $\alpha_1=.60$ ;  $\alpha_2=.58$ ) - mainly cognitive efforts aimed at finding solution of the problem; **Active accommodation** ( $\alpha_1=.60$ ;  $\alpha_2=.59$ ) - taking concrete, practical actions aimed at better handling the situation; **Avoidance** ( $\alpha_1=.44$ ;  $\alpha_2=.50$ ) - describing cognitive or behavioral attempts to avoid or escape from the situation;

**Passivization** ( $\alpha_1=.41$ ;  $\alpha_2=.49$ ) - giving up from the attempt to directly resolve the problem, accepting the situation; **Fatalism and religion** ( $\alpha_1=.57$ ;  $\alpha_2=.72$ ) - turning to religion, confidence to the Act of God, or fortune; **Reinterpretation** ( $\alpha_1=.62$ ;  $\alpha_2=.69$ ) - containing efforts directed to create predominantly positive meaning to stressful event; **Expression of emotions** ( $\alpha_1=.57$ ;  $\alpha_2=.68$ ) - open expression of emotions, venting of feelings; **Wishful thinking** ( $\alpha_1=.65$ ;  $\alpha_2=.67$ ) - describing day-dreaming, desires about the change or disappearance of the source of stress; **Humor** ( $\alpha_1=.78$ ;  $\alpha_2=.85$ ) - introducing humor, recognizing amusing sides of the situation; **Seeking social support** ( $\alpha_1=.48$ ;  $\alpha_2=.54$ ) - turning to other people and close persons, asking for emotional support. Subjects were to appraise how often they used each of presented strategy in previously selected stressful situations (1 = not at all, 4 = often). Scores on each coping scale are computed by summing the answers on corresponding items and vary in theoretical range of 4-16.

## RESULTS AND DISCUSSION

Results on the presence of various sources of stress and their appraised severity as measured by the Problem scale showed to be relatively comparable in the two measurement points. Mean item scores for thirteen items with average appraisals of 2.5 (corresponding to the midpoint of the scale) or higher in either of the time points are presented in Table 1.

**Table 1. Mean appraisals of problem severity for selected items of Problem scale administered in two measurement points (N=421) with the corresponding values of the Paired-Samples t-test for the significance of change**

<i>Item</i>	<i>Time point I</i>	<i>Time point II</i>	<i>t</i>
4. ...missing family and friends.	2.71	2.78	-1.65
9. ...time passes too slowly.	2.68	2.44	4.53***
14...feeling tired, no sleep.	2.77	2.56	4.38***
16...no sex in a while.	2.89	2.95	-1.49
17...losing too much time in forming and waiting.	2.79	2.65	2.80**
18...punishing all due to mistake of just one soldier.	2.73	2.57	2.88**
21...lack of freedom of movement.	2.64	2.49	3.32***
22...problems with maintenance of hygiene.	2.78	2.55	4.40***
22...problems with maintenance of hygiene.	2.69	2.47	4.29***
30...not enough time for hygiene and meals.	2.20	2.68	-9.09***
31...insufficient amount or poor food.	2.42	2.67	-5.29***
38...cannot help the family to overcome problems.	2.66	2.57	1.96*
40...not enough free time.	2.85	2.82	0.81
43...poor toilet rooms.			

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

For the majority of items of the Problem scale, slight but significant decrease in average problem appraisals was observable from the beginning to the end of the basic training. Two items showing changes in the opposite direction are interesting to note. These are the item 31 - describing problems related to the amount or the quality of food offered, and the item 38 - stating difficulties on how to help one's own family. As shown in Table 1, these problems seem to become significantly more salient in the course of basic training. According to the average appraisals obtained in the second time point, these are among the most bothersome sources of stress for recruits in the final weeks of basic training.

The data on frequencies and proportions of choice of each of the six proposed categories of stressful situations are given in Table 2 for the two measurement points.

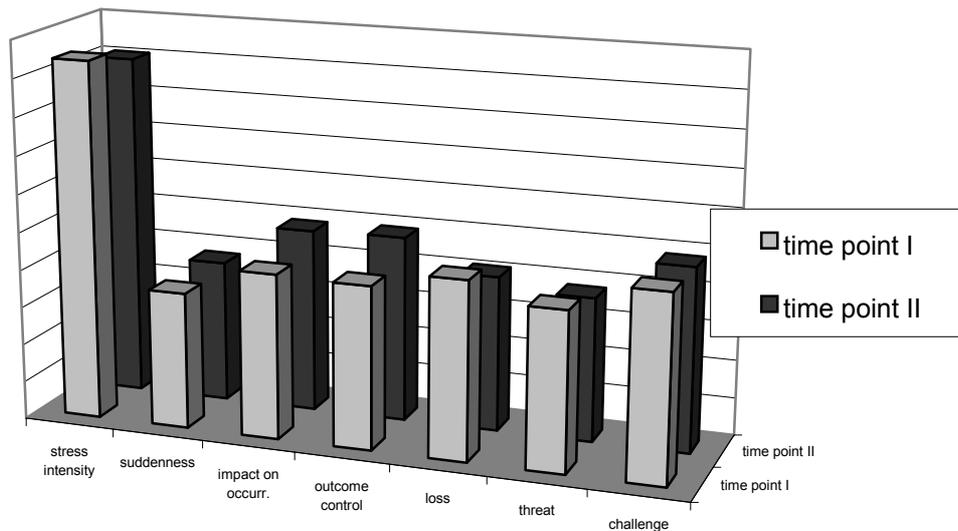
**Table 2. Distributions of choice of the proposed categories of stressful situations experienced at the beginning (N=449) and before the end (N=421) of the basic military training**

Categories of problems	Measurement point I		Measurement point II	
	N	%	N	%
Housing	68	15.1	56	13.3
Relationships with other recruits	4	0.9	3	0.7
Military regime	82	18,3	70	16.6
Relationships with superordinates	13	2,9	6	1.4
Disconnection of civilian life	269	59,9	276	65.6
Unclear situations during military service	13	2,9	10	2.4
<i>Total</i>	449		421	

As shown in Table 2, the proportions of choice of particular groups of problems appear to be rather similar in the two measurement points. Problems resulting from *disconnection of civilian life* proved to be the predominant source of adjustment difficulties for the majority of recruits during basic military training. This category was selected as the most stressful noticeably more frequently than all other categories taken together (about 60% and 66% of subjects in the first and second time point respectively). Problems related to adjustment to the *institutional regime* were rated as the most stressful by 18,3% and 16,6% of the sample at the beginning and close to the end of basic training, respectively. Slightly lower percentages apply also for the problems of *housing* in the Centre (15,1% and 13,3%), whereas the number of participants choosing some of the remaining three categories of stressful situations was rather negligible at both measurement points.

Mean values for seven measures of cognitive appraisals with reference to selected categories of stressors, obtained in both time points are presented in Figure 1. Results point to moderately high level of *stress intensity* experienced by the conscripts at the beginning ( $M=1.89$ ,  $SD=.73$ ) and before the end ( $M=1.81$ ,  $SD=.76$ ) of basic military training. Selected stressful situations were generally appraised as being highly predictable and *expected* ( $M_I=.72$ ,  $M_{II}=.75$ ), and the average results on secondary appraisal measures speak of rather low level of *perceived control* over the *occurrence* ( $M_I=.87$ ,  $M_{II}=.97$ ) as well as the *outcome* ( $M_I=.86$ ,  $M_{II}=.98$ ) of selected categories of problems encountered during basic training. Furthermore, relatively low values were also obtained on the scales of emotions measuring three types of primary appraisals, with mean appraisals of *challenge* ( $M_I=.98$ ,  $SD=.64$ ;  $M_{II}=.97$ ,  $SD=.63$ ) being somewhat higher than those of *threat* ( $M_I=.84$ ,  $SD=.61$ ;  $M_{II}=.76$ ,  $SD=.64$ ) and *loss* ( $M_I=.94$ ,  $SD=.69$ ;  $M_{II}=.82$ ,  $SD=.70$ ).

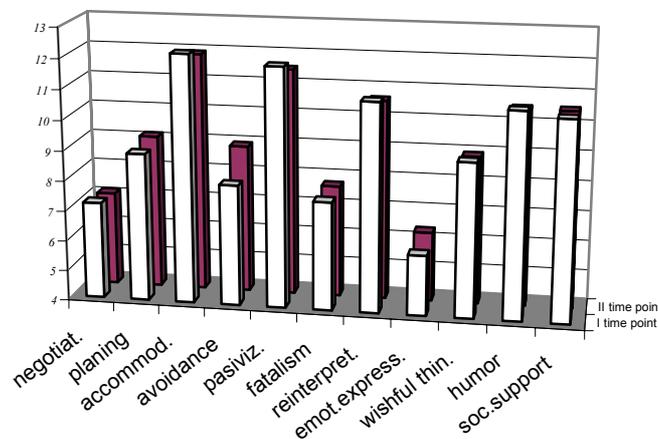
**Figure 1. Changes in cognitive appraisals of stressful situations experienced by conscripts during basic training (N=421)**



Repeated measures MANOVA revealed significant differences between the results on the set of cognitive appraisals measures obtained in two measurement points ( $F=6.08$ ,  $df=7$ ,  $p<.001$ ). According to results of the univariate tests of significance, observed changes in cognitive appraisals include the perceptions of somewhat higher control over the occurrence ( $F=7.78$ ,  $p=.006$ ) and the outcome ( $F=6.83$ ,  $p=.009$ ) of stressful situations, as well as lower level of threat ( $F=13.68$ ,  $p<.001$ ) and loss ( $F=24.03$ ,  $p<.001$ ) experienced at the end in comparison to the beginning of basic training.

Average profiles of coping with selected stressful situations obtained at the beginning and before the end of basic military training are presented in Figure 2. The most frequently used ways of coping in both measurement points were *active accommodation* ( $M_I=12.25$ ,  $M_{II}=11.89$ ) and *passivization* ( $M_I=11.90$ ,  $M_{II}=11.52$ ), followed by *reinterpretation* ( $M_I=10.95$ ,  $M_{II}=10.56$ ), use of *humor* ( $M_I=10.77$ ,  $M_{II}=10.52$ ) and *seeking social support* ( $M_I=10.61$ ,  $M_{II}=10.51$ ). The lowest means were obtained for *expression of emotions* ( $M_I=5.96$ ,  $M_{II}=6.32$ ) and *negotiation* ( $M_I=7.20$ ,  $M_{II}=7.09$ ).

**Figure 2. Coping profiles of recruits in the two measurement points**



The differences between the scores on 11 coping scales obtained in two measurement points were tested by repeated measures MANOVA. The analysis yielded significant multivariate differences ( $F=9.22$ ,  $df=11$ ,  $p<.001$ ), and the univariate tests showed that, after the 5-week period, the strategies of active accommodation, passivization and reinterpretation were used somewhat less frequently on the average, and avoidance and expression of emotions significantly more frequently, in comparison with the first measurement point.

As can be seen on Figure 2, no marked differences were found in the general profile of coping between the results obtained at the two measurement points. Nevertheless, the changes observed in the level of usage of particular strategies seem to follow in part the changes found in cognitive appraisals measures. This applies primarily to the observed changes in appraised controllability of selected stressful situation, but also to some objective changes, e.g., in specific situational demands or the amount of restrictions imposed by institutional rules. Thus, for instance, more frequent use of active accommodation strategies at the very beginning of service than at the end of basic training doesn't seem to be surprising. Namely, the content of this scale includes the attempts aimed at fitting into new way of life, learning necessary skills, and the like. Further, the increase in scores on the avoidance scale seems to be attributable to the changes in objective restrictions during basic training, since the real opportunities for positive outcome of some behaviors described by the scale items (e.g., asking for going home, to the city, etc.) prove to be especially low or negligible in the first two weeks of military service.

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