MOTIVATION AND SATISFACTION IN THE NATIONAL SECURITY ENVIRONMENT

This research has studied the relation between motivation and job satisfaction in a national security organization. Two questionnaires for motivation and professional satisfaction were used as assessment tools. The research group consisted of 80 militaries, respectively 80 civilian subjects representing the control group. Several types of relations were studied, considered relevant for the study objectives, such as: the relation between work motivation and management satisfaction and interpersonal relationships within the team, with respect to work organization and functional communication; the relation between the motivation for accomplishment through work and the degree of salary satisfaction, rewards and career advancement opportunities; the relation between the levels of general satisfaction and the motivation for accomplishment through work; the relation between the higher levels of satisfaction with work organization and functional communication, respectively with management and interpersonal relationships of the military group, compared to the control group of civilian employees. The results of this research have some practical value, advancing the possibility that some conclusions can be assimilated in the human resources policies of national security institutions, in order to optimize staff motivation and maximize performance.

Keywords: motivational dominants; professional satisfaction; human resources; national security.

The global theoretical study of the relationship between motivation and professional satisfaction is not, at this stage of knowledge, a matter of novelty. What are endeavouring, through this study, is to highlight the way in which the motivation-satisfaction relation works concretely in one of the of the national security structures, in order to streamline the professional training and preparation process.

Clear understanding of all research presented in this study involves, first of all, a general problem of conceptual delimitation on motivation and satisfaction in the military profession and, secondly, a problem of methodology, highlighting the specifics and particularities between motivation and satisfaction in the national security system.

Classical theories of motivation are based on personal needs analysis, equity theory, expectation theory, interactionist theories, respectively the force field theory and the individual-environment relational theory.

In a very general definition, motivation is a "great category of internal determinations of behaviours, psychological activities, and subjective states, which explains and justifies a person’s action" (larousse.fr/dictionnaire/).

From the perspective of the human needs’ theory pyramidally hierarchic (physiological, security, social, self-esteem and self-realization), these needs are in themselves motivation sources, due to the fact that they require to be satisfied, and when a need has been met, the need for higher level will become a new source of motivation.

Criticized or revised the human needs’ theory remains a benchmark in explaining the relation between work motivation, satisfaction, and performance. In the same sense, it is estimated that there is a constellation of factors determinants of satisfaction, some of which are largely related to professional activity (career, promotion, job content; responsibility; performance; feeling of power, etc.) and are considered motor factors or intrinsic, and others related to the work environment (personnel policy, working conditions, job security, interpersonal relationships, salary and rewards, social benefits, etc.), are considered hygiene factors. Over time, studies have been conducted that have either refuted, or confirmed Herzberg’s assertions. In another approach it is...
considered that the main agents of motivation are represented by: the need for self-fulfilment through success and self-surpassing; the need for power through the realisation of the desire to influence and to lead others; the need for affiliation or association by establishing, maintaining and strengthening a positive emotional relationship with others. A later study demonstrated the importance of motivation, incentive value and probability of success for predicting the achievement of performance and of the frequency the affiliation acts are performed. Both theory and research lead to the following conclusions: the force of motivation, especially in relation to the force of other personal factors, is the most important determinant of the frequency of the operative act; the value of the incentive is the most important determinant of cognition-based choices; driving force and the probability of success is combined multiplicatively to predict the strength or the probability of the response; all determinants and the highlighted interaction represent collectively over 75% of the variation of operators, such as frequency of the affiliated acts. The rest of the variation is easily attributable to environmental opportunities. Survival needs are identified (material and physiological needs), relational needs (needs of esteem and belonging) and needs development or growth (self-fulfilment, self-realization, taking responsibility) expressed synthetically by the acronym ERG. An applied study of this theory highlighted the causal relationship between meeting human needs, performance at work and individual personality differences (self-esteem) both for managers, and for employees. Another study, conducted in the military, proposed three new concepts to be included in the relation category (respect from the organization, respect for the supervisor, the need for personal freedom). For this purpose, a questionnaire, on the concepts of existing and proposed needs, was created and administered on a number of 630 soldiers of 11 types of organizational structures in the US naval forces. The results were subjected to factor analysis and regression analysis which confirmed both empirical validity, as well as the predictive power of the concept of organizational respect. At the same time, the statistical analysis of the results rejected the other two proposed concepts but provided unexpected support for the discussion of two new relation concepts. The literature offers numerous other studies regarding the relation between the components reflected by the ERG theory.

From the perspective of the equity theory, it is stated that, always, people compare the efforts made and the rewards obtained at work with the efforts and results of another relevant person or group. This comparison emphasizes the quality of the exchange, starting from the premise that the proof of fairness contributes to job satisfaction, while unfairness is perceived as inequity that generates job dissatisfaction. From the expectations’ theory perspective, it is considered that any motivated behaviour is the product of certain key variables, such as: expectation or anticipation, a foreseeable outcome as a result of an action; instrumentality or the ability to resolve; valence or attractiveness and the individual importance of work. Subsequent studies have revealed the importance of motivated behaviour and of its determining factors.

The described perspectives (needs theory, expectations theory, equity theory) have one thing in common, that they mainly focus on the individual.

The literature shows that there are other perspectives centered on the idea that motivation is born when the individual meets their environment. A perspective is provided by field theory, which considers the motivation of the individual to be generated by the attractions or barriers present in the environment where their activity takes place. The fundamental idea is that this theory can be a tool for the integration of various divergent physiological, psychological, and sociological aspects on an interdependent basis, explaining social behavior as the result of the interaction between a structure of a total situation and the distribution of all the forces present in its field. The force field theory has found a wide applicability in various research areas, such as organizational, economic, educational, sociological, psychological, etc. Another perspective considers that the basic unit to be studied is neither the individual nor the environment, but the interaction between the individual and the environment, which generates the real motivations. The conceptual model of human motivation is presented in terms of behavioral, interactional and relational, where motivation is the result of cognitive processing in behavioral action plans of dynamics or individual needs. This model of dynamic behavior achieved
in three interactional phases (motivation, planning, action) aroused great interest for disciplines such as sociology, education, law, economics, psychiatry, clinical psychology, medicine, philosophy, sports and others\textsuperscript{51,52,53}.

Given these theories of the interaction between motivation, satisfaction and performance, with their inherent advantages and limitations, we aim to study how they can be applied, in their essence, to the specifics of the military organization environment.

**Objectives**

The purpose of this research is to investigate the relation between motivation and professional satisfaction dimensions in the specific military structures of the national security system\textsuperscript{54}.

The research objectives are constrained by three obvious areas of professional and scientific concern, respectively theoretical, methodological, and practical-applicative \textsuperscript{55}.

The theoretical objective was to test some hypotheses resulting from the postulates on the relation between motivation and satisfaction advanced by some of the field specific theories.

The methodological objective aimed at the concrete approach assumed by any empirical investigation in the field of organizational psychology, including randomization groups of subjects, the choice and application of the research tools consecrated from the specialized literature, the explanation of the instructions and experimenting in direct contact with subjects on the field, creating thus, an adequate research design and statistical processing.

The practical-applicative objective advanced the possibility that some of the conclusions of the research can be transmitted and used in human resources policies of the national security system organizations, in order to increase the level of motivation and professional satisfaction of the staff and, implicitly, their performance.

**Method**

**Hypotheses**

The research aimed at testing in two groups – a research group (military) and a control group (civilians) – following the basic assumptions of the literature on the relations between motivation and satisfaction, the following hypotheses being formulated:

- $H_1$ – The more satisfied they are with the management and the interpersonal relationships in group, respectively by the manner of work organization and the functional communication, the military have a higher motivation of accomplishment through work.
- $H_2$ – Militaries with a high level of salary satisfaction, rewards and career advancement opportunities show a high, directly proportional level for motivation of accomplishment through work.
- $H_3$ – The military personnel with a high level of general satisfaction have a high, directly proportional level for motivation of accomplishment through work.
- $H_4$ – The military personnel have higher levels of satisfaction with work organization and functional communication, respectively towards the management and interpersonal relationships in the team, compared to employees in civil organizations.

**Participants**

The investigated group included 160 subjects, grouped in two numerically equal sublots, the first representing the research group formed by the military (G 1), and the second being the control group consisting of civilians (G 2). To establish the subjects, we used a random selection (convenience sample), so the two groups, on which we have applied the research tools, cannot be considered representative, and the results cannot be generalized for the entire personnel in national security environment, nor for the civilian population.

For G 1, consisting of $N = 80$ subjects belonging to a military structure, the statistical analysis of the central trend indicators highlighted the following results: mean age 38.07 years (min. = 25, max. = 50, standard deviation =6.26); 75 men (93.8%) and 5 women (6.2%); 53 (66.3%) of the subjects are high school graduates, one (1.3%) graduated post-secondary courses, and 26 (32.5%) hold university degrees, but do not hold positions or ranks corresponding to the obtained undergraduate level, forming a significant socio-professional layer of the military overqualified in relation to the work they currently carry out. From G1, 54 subjects (67.5%) occupy positions and ranks at the level
corresponding to their graduated studies.

Group G 2 included 80 civilian subjects, and the statistical analysis of the central indicators trend showed that: the average age was 41.08 years (min. = 25, max. = 58, standard deviation = 7.74); 47 (58.8%) men and 33 (41.3%) women; 22 (27.5%) of the subjects are high school graduates, 12 (15%) graduated post-secondary courses, and 46 (57.5%) have university degrees. In group G 2, 43.8% of the subjects occupy positions and ranks below their training level, attested by the obtained diplomas, 1.2% declare the occupation well below the level of training, 52.5% occupy positions in accordance with the level of training, and 2.5% declare a socio-professional status superior to their training.

**Instruments**

To achieve the empirical undertaking of collecting the data necessary for testing the research hypotheses, we chose two standardized tools used at organizational evaluations in companies and institutions: the ”Motivational Dominant” – DM questionnaire, and the ”Professional Satisfaction” – SP questionnaire 56.

The DM questionnaire comprises of 32 items with direct scoring, representing statements about various emotions, feelings, attitudes and organizational behaviors, correlative to professional motivation, grouped from the perspective of four factors: leadership, expertise, relations and subsistence 57. Referring to the validity of the instrument, the author states that, on a sample of 320 subjects, the initial study obtained an internal consistency $\alpha = 0.941$ at the level of the questionnaire as a whole and the following internal consistencies by factors: $\alpha = 0.881$ (leadership), $\alpha = 0.902$ (expertise), $\alpha = 0.906$ (relationship) and $\alpha = 0.802$ (subsistence).

The SP questionnaire includes 32 items, out of which 18 with direct scoring and 14 with reverse scoring, representing statements about various emotions, feelings, organizational attitudes and behaviors related to professional satisfaction, grouped from the perspective of three specific and one cumulative factor, calculated based on their average, representing the overall satisfaction: remuneration and promotion, leadership and interpersonal relationships, organization and communication, respectively general satisfaction (Constantin, 2004, p. 285). The author states that, after validation on a sample of 320 subjects, an internal consistency $\alpha = 0.872$ was obtained on the whole questionnaire and the following internal consistencies on factors: $\alpha = 0.820$ (remuneration and promotion), $\alpha = 0.760$ (management and interpersonal relationships) and $\alpha = 0.738$ (organization and communication).

Demographic data were collected for the two instruments, as well age, sex, education and profession or occupation. Because the two instruments had different measurement scales, the DM questionnaire being provided with a seven-step scale, and the SP questionnaire with a six-step scale, was chosen to unify the quantification of responses method, by adopting a common Lickert-type scale in five steps, with the following meanings: 1 – Never agree, 2 – Very rarely agree, 3 – Sometimes agree, 4 – Very often agree, 5 – Always agree.

**Procedure**

The research was designed as a quantitative, correlational, and differential study, aiming at testing the hypotheses stated above.

The research design defined three classes of variables, as follows: motivational variables, job satisfaction variables and socio-demographic factors. At the same time, they were grouped into two other categories: dependent variables (motivational and job satisfaction) and independent variables (socio-demographic). The research tools were selected so that the variables involved in the hypotheses to be identified in the factors provided by the questionnaires. Therefore, the motivational variables were assessed with the DM questionnaire, and the job satisfaction variables were assessed with the SP questionnaire.

In accordance with the instructions of the DM questionnaire, the motivational factors, respectively motivational factors variables were defined, as follows:

- need for power: the desire to influence others, the propensity for leadership functions and decision-making independence – the leadership factor (M_con);
- needs of accomplishment through work: the desire to excel in professional activities, to be considered a good professional – the expertise factor (M_exp);
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affiliation needs: the desire to establish and cultivate friendships within the group, to work with pleasure in a stenic and supportive environment, the propensity for harmonious relationships – the relational factor (M_rel);

• basic needs of existence: concern for the fundamental needs of existence, such as rest, stability, money, food, security - the subsistence factor (M_sub).

Similarly, the variables of job satisfaction, respectively the factors of professional satisfaction, were defined in accordance with the instructions of the SP questionnaire, as follows:

• satisfaction with salaries, rewards, and career advancement opportunities: the degree of satisfaction of the staff regarding work recognition provided through pay, bonuses or other financial incentives, possibilities of promotion or recognition of merit – the remuneration and promotion factor (Sat_rp);

• satisfaction with leadership and interpersonal relationships within the team: degree of staff satisfaction towards an optimal psychosocial climate as well as regarding a harmonious working relation with colleagues and superiors – the factor of communication and interpersonal relations (Sat_cr);

• satisfaction with work organization and functional communication: the degree of satisfaction on how work is organized and carried out through task definition, effort efficiency, effective communication, feedback – the organization and communication factor (Sat_oc);

• general satisfaction: the degree of satisfaction of the staff with work in general, in terms of organization, rewards existence and level, the quality of the psychosocial climate – the general satisfaction factor (Sat_ge).

Regarding the demographic variables, we specify that the age was entered in the database as an absolute value, and the other variables were coded in numerical expressions, for statistical processing, as follows:

• sex/gender was transformed into a binary variable, having code 1 for men, respectively code 2 for women;

• the following codes have been assigned to the training level: 1 - elementary studies, 2 - middle school, 3 - high school, 4 - post-high school and 5 - University studies;

• the adequacy of the occupation at the level of training was coded with – 2 - much below level of education, – 1 - below the level of education, 0 - at the level of education, 1 – above education level and 2 - well above education level.

The administration of the questionnaires was carried out with the assurance of anonymity and guarantee the confidentiality of both the answers and the demographic and socio-professional data.

Results

Descriptive analysis of motivational variables

Table no. 1 presents the descriptive statistics of the motivational variables, for the two research groups.

It is observed that the military in G 1 have higher averages and higher homogeneity of responses (smaller standard deviations) compared to civilians in G 2, except for the subsistence factor, respectively the motivation for subsistence (M_sub), where the situation is reversed.

In G1, the difference between the motivational factor and the highest average, that is, the expertise factor, represented by the needs of accomplishment through work (M_exp = 4.60) and the motivational factor with the lowest average, i.e., the subsistence factor, focused on the basic needs of existence (M_sub = 4.34) is Δ 1 = 0.26.

In G2, the difference between the motivational factor and the average is the largest, represented by the affiliation needs (M_rel = 4.46) and the motivational factor with the lowest average, i.e., the subsistence factor, focused on the basic needs of existence (M_sub = 4.34) is Δ 2 = 0.53.

In G1, the highest motivational homogeneity is recorded at the level of the expertise factor, of the needs for achievement through work, where the standard deviation is SD = 0.50, and the highest heterogeneity is identified by the driving factor, deriving from the power needs, where the standard deviation is SD = 0.69.

At the same time, in G2, the highest homogeneity is recorded at the level of the subsistence factor, of the subsistence needs, where the standard deviation is SD = 0.51, and the highest heterogeneity is identified by the driving factor, deriving from the power needs, where the standard deviation is SD = 0.69.

Comparing the results of the driving factor, a higher homogeneity can be seen for group G1 (military) in relation to group G2 (civilians).
Descriptive analysis of job satisfaction variables

Table no. 2 presents the descriptive statistics of the satisfaction variables for the two groups under study.

It is observed that the subjects in group G 1 have higher averages than the subjects in group G2, both at the general satisfaction level factor, Sat_ge_G 1 (M = 3.72) compared to Sat_ge_G 2 (M = 3.46), as well as at the level of each source of satisfaction in slice, as follows: the average remuneration and promotion factor of G 1 is higher than the average remuneration and promotion factor of G 2, where Sat_rp_G 1 (M = 3.18) > Sat_rp_G 2 (M = 2.93); the average of the communication and interpersonal relations factor of G 1 is higher than the average factor of communication and interpersonal relationships of G 2, where Sat_cr_G 1 (M = 4.04) > Sat_cr_G 2 (M = 3.78); the mean of the organization and communication factor of G 1 is higher than the average of the organization and communication factor of G 2, where Sat_oc_G 1 (M = 3.95) > Sat_oc_G 2 (M = 3.69).

At the same time, it is evident that at the level of the G 1 group there is a higher heterogeneity, objectified by higher standard deviations, at the level of all job satisfaction variables.

In G1, the source of satisfaction with the highest average for the military it is given by the communication and interpersonal relations factor, i.e., by the satisfaction regarding the

Table no. 2
DESCRIPTIVE STATISTICS OF THE SATISFACTION VARIABLES FOR THE TWO GROUPS

<table>
<thead>
<tr>
<th>Group</th>
<th>Sat_rp</th>
<th>Sat_cr</th>
<th>Sat_oc</th>
<th>Sat_ge</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Mean</td>
<td>3.1895</td>
<td>4.0406</td>
<td>3.9538</td>
<td>3.7258</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.51036</td>
<td>.66761</td>
<td>.70799</td>
<td>.55214</td>
</tr>
<tr>
<td>G2</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Mean</td>
<td>2.9387</td>
<td>3.7870</td>
<td>3.6988</td>
<td>3.4680</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.48791</td>
<td>.63231</td>
<td>.62955</td>
<td>.49709</td>
</tr>
</tbody>
</table>

Author’s conception

of G 2, where Sat_rp_G 1 (M = 3.18) > Sat_rp_G 2 (M = 2.93); the average of the communication and interpersonal relations factor of G 1 is higher than the average factor of communication and interpersonal relationships of G 2, where Sat_cr_G management and interpersonal relationships in the team (Sat_cr = 4.04), and the source of satisfaction with the lowest average is given by the remuneration and promotion factor, that is, satisfaction with pay, rewards, and opportunities.
for advancement in career (Sat_rp = 3.18). The difference between the averages of the two factors is Δ 3 = 0.86.

In group G2, the satisfaction factor with the highest average is represented by satisfaction with leadership and interpersonal relationships within the team (Sat_cr = 3.78), and the satisfaction factor with the lowest average, is given by the satisfaction regarding salary, rewards and career advancement opportunities (Sat_rp = 2.93), the difference between them being Δ 4 = 0.85.

In group G1, the highest homogeneity is recorded at the level satisfaction regarding payments, rewards, and opportunities for career advancement, where the standard deviation is SD = 0.51, and the highest heterogeneity is at the level of satisfaction with work organization and functional communication, where the standard deviation is SD = 0.70.

In G2 group, the highest homogeneity is recorded at the level satisfaction regarding payments, rewards, and opportunities for career advancement, where the standard deviation is SD = 0.48, and the highest heterogeneity is found at the level of management satisfaction and interpersonal relationships in the team, where the standard deviation is SD = 0.63.

Motivational and job satisfaction variable correlational analysis

Table no. 3 shows the matrix of correlations between the job satisfaction and motivational variables, for the two groups, where noteworthy are the following results:

- **For G₁ (military)**
  - salary, rewards and career advancement opportunities satisfaction Sat_rp correlates significantly (r = 0.238; p <.03) only with power requirements M_con;
  - satisfaction with management and interpersonal relationships Sat_cr correlates significantly with all motivational variables, thus with the needs of power M_con (r = 0.327; p <.003), work requirements M_exp (r = 0.460; p <.004) and basal existence M_sub (r = 0.316; p <.004);
  - satisfaction with work organization and functional communication Sat_oc correlates significantly with all motivational variables, thus with the needs of power M_con (r = 0.364; p <.001), work requirements M_exp (r = 0.472; p <.001), affiliation needs M_rel (r = 0.318; p <.004) and basic needs for existence M_sub (r = 0.313; p <.005);
  - overall satisfaction correlates significantly with all motivational variables, thus with power needs M_con (r = 0.364; p <.001), power achievement through work M_exp (r = 0.437; p <.001), affiliation needs M_rel (r = 0.324; p <.003) and the basic needs for existence M_sub (r = 0.319; p <.004);
  - all variables of job satisfaction correlate significantly with each other and, each in section, with general satisfaction.

<table>
<thead>
<tr>
<th>Group</th>
<th>M_con</th>
<th>M_exp</th>
<th>M_rel</th>
<th>M_sub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat_rp</td>
<td>.238*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sat_cr</td>
<td>.327**</td>
<td>.460**</td>
<td>.318**</td>
<td>.316**</td>
</tr>
<tr>
<td>Sat_oc</td>
<td>.373**</td>
<td>.472**</td>
<td>.329**</td>
<td>.313**</td>
</tr>
<tr>
<td>Sat_ge</td>
<td>.364**</td>
<td>.437**</td>
<td>.324**</td>
<td>.319**</td>
</tr>
<tr>
<td>Sat_rp</td>
<td>.258*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sat_cr</td>
<td>.301**</td>
<td>.412**</td>
<td>.362**</td>
<td></td>
</tr>
<tr>
<td>Sat_oc</td>
<td>.410**</td>
<td>.548**</td>
<td>.501**</td>
<td>.232*</td>
</tr>
<tr>
<td>Sat_ge</td>
<td>.378**</td>
<td>.459**</td>
<td>.413**</td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**

*Correlation is significant at the 0.05 level (2-tailed).**
b. for G₂ (civilians)

- salary satisfaction, rewards, and career advancement opportunities Sat_rp correlates significantly (r = 0.258; p < .021) only with power requirements M_con;
- satisfaction with management and interpersonal relationships Sat_cr significantly correlates with M_con power requirements (r = 0.301; p < .007), work needs M_exp (r = 0.412; p < .001), work needs M_rel affiliation (r = 0.362; p < .001), but not with the basic necessities of existence M_sub;
- satisfaction with work organization and functional communication Sat_oc correlates significantly with all motivational variables, thus with the needs of power M_con (r = 0.410; p < .001), the work requirements M_exp (r = 0.548; p < .001), M_rel affiliation needs (r = 0.501; p < .001) and with the basic necessities of existence M_sub (r = 0.232; p < .038);
- overall satisfaction Sat_ge correlates significantly with power needs M_con (r = 0.388; p < .001), work requirements M_exp (r = 0.459; p < .001), M_rel affiliation needs (r = 0.413; p < .001), but not with the basic necessities of existence M_sub;

as in the experimental group G₁ (military), in group G₂ (civilians) all job satisfaction variables correlate significantly with each other and, individually, with general satisfaction.

Table no. 4 shows the matrix of correlations between the job satisfaction and demographic variables for the two groups, respectively group G₁ (military) and group G₂ (civilians), where the following are notable results:

- while in G₁ there are no statistically significant correlations between job satisfaction and any of the demographic variables, in G₂ we found that occupation adequacy and training level - Adequacy correlates significantly with salary satisfaction, rewards and career advancement opportunities Sat_rp (r = 0.255; p < .022) and overall satisfaction Sat_ge (r = 0.239; p < .032), the gender variable has a statistically significant correlation with satisfaction in leadership and interpersonal relationships in the Sat_cr collective (r = 0.238; p < .033), with satisfaction with work organization and functional communication Sat_oc (r = 0.396; p < .001) and with the general satisfaction Sat_ge (r = 0.285; p < .010);

- in group G₁ it is observed that age correlates statistically negatively with education - Educ (r = -0.410, p < .001) and positively with the occupation adequacy and training level - Adequate (r = 0.411, p < .001), and education correlates significantly statistically, negatively with the occupation adequacy and training level - Adequate (r = -0.993, p < .001);

- in group G₂ statistically significant correlations are observed between the various variables demographic, thus: age has an inverse correlation with the level of education - Educ (r = -0.298; p < .007) and a direct correlation with the occupation adequacy and training level - Adequate (r = 0.255; p < .010).

Table no. 4
THE CORRELATION MATRIX BETWEEN JOB SATISFACTION AND DEMOGRAPHIC VARIABLES

<table>
<thead>
<tr>
<th>Group</th>
<th>Var</th>
<th>Age</th>
<th>Gen</th>
<th>Educ</th>
<th>Adecv</th>
</tr>
</thead>
<tbody>
<tr>
<td>G₁</td>
<td>Educ</td>
<td>- .410**</td>
<td>- .993**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adecv</td>
<td>.411**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G₂</td>
<td>Educ</td>
<td>- .298**</td>
<td>- .236*</td>
<td>.321**</td>
<td>- .493**</td>
</tr>
<tr>
<td></td>
<td>Adecv</td>
<td></td>
<td></td>
<td></td>
<td>.255*</td>
</tr>
<tr>
<td></td>
<td>Sat_rp</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Sat_cr</td>
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<tr>
<td></td>
<td>Sat_oc</td>
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</tr>
<tr>
<td></td>
<td>Sat_ge</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
* . Correlation is significant at the 0.05 level (2-tailed).

(Author’s conception)
(r = 0.321; p < .004), and the level of training - Educ presents an inverse correlation with the occupation adequacy and training level - Adequacy (r = -0.493; p < .001).

Table no. 5 shows the matrix of correlations between the motivational and demographic variables in the two groups, respectively the group G 1 (military) and group G 2 (civilians), where the following results are emphasised:

Table no. 5
THE CORRELATION MATRIX BETWEEN THE MOTIVATIONAL AND DEMOGRAPHIC VARIABLES

<table>
<thead>
<tr>
<th>Group</th>
<th>Variable</th>
<th>Age</th>
<th>Adequity</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1</td>
<td>M_con</td>
<td>-.352</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M_exp</td>
<td>-.315</td>
<td></td>
</tr>
<tr>
<td>G2</td>
<td>M_con</td>
<td>.369</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M_rel</td>
<td>.230</td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
* . Correlation is significant at the 0.05 level (2-tailed).

(Author’s conception)

- for the G 1 group there are significant negative correlations between age and power needs M_con (r = -0.352; p <.001), as well as between age and work needs M_exp (r = -0.315; p <.004);
- for group G 2 there are significant positive correlations between occupation adequacy and training level - Adequacy and power needs M_con (r = 0.369; p<.001), as well as between occupation adequacy and training level - Adequacy and relational needs M_rel (r = 0.230; p <.040).

Analysis of the difference between the averages of the two groups

Table no. 6 presents the averages of the variables for the two groups, which were the basis for calculating the significance of the difference in averages.

The significance of the difference between the subjects’ averages from those two groups was analyzed, for the variables of motivation and satisfaction, in accordance with gender, training level and belonging to group G 1 (military) or group G 2 (civilians).

Table no. 7 presents the statistical results specific to the significant differences establishment between the analyzed groups.

Instead, as presented in Table no. 7, significant differences were found between group G 1 (military) and group G 2 (civilians), for other variables of motivation and satisfaction, as follows:

- power requirements or driving factor (M_cond): F = 11,913, sig. = .001, t = 4.13, p < .001, CI 95% (.21450, .60080);
- performance requirements or expertise factor (M_exp): F = 1,542, sig. = .216, t = 2.101, p < .037, CI 95% (.01024, .33046);
- satisfaction with salaries, rewards, and opportunities for career advancement or remuneration and promotion factor (Sat_rp): F = .012, sig. = .914, t = 3.176, p < .002, CI 95% (.09884, .4666);
- satisfaction with leadership and interpersonal relationships or communication factor and interpersonal relationships (Sat_cr): F = .308, sig. = .580, t = 2.467, p < .017, CI 95% (.04579, .46421);
- satisfaction with work organization and communication or the organizing factor, and communication (Sat_oc): F = .308, sig. = .397, t = 2.407, p < .017, CI 95% (.05057, .45668);
- general satisfaction (Sat_ge): F = 1,393, sig. = .240, t = 3,103, p < .002, CI 95% (.09369, .42181).
Table no. 6

**AVERAGES OF MOTIVATION AND SATISFACTION VARIABLES FOR EXPERIMENTAL AND CONTROL GROUPS**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>M_con</td>
<td>G1</td>
<td>80</td>
<td>4.3526</td>
<td>.56400</td>
<td>.06306</td>
</tr>
<tr>
<td></td>
<td>G2</td>
<td>80</td>
<td>3.9306</td>
<td>.69876</td>
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</tr>
<tr>
<td>M_exp</td>
<td>G3</td>
<td>80</td>
<td>4.6022</td>
<td>.50524</td>
<td>.05649</td>
</tr>
<tr>
<td></td>
<td>G4</td>
<td>80</td>
<td>4.4319</td>
<td>.52004</td>
<td>.05814</td>
</tr>
<tr>
<td>M_rel</td>
<td>G5</td>
<td>80</td>
<td>4.5080</td>
<td>.54868</td>
<td>.06134</td>
</tr>
<tr>
<td></td>
<td>G6</td>
<td>80</td>
<td>4.4612</td>
<td>.57205</td>
<td>.06396</td>
</tr>
<tr>
<td>M_sub</td>
<td>G7</td>
<td>80</td>
<td>4.3419</td>
<td>.55221</td>
<td>.06174</td>
</tr>
<tr>
<td></td>
<td>G8</td>
<td>80</td>
<td>4.4097</td>
<td>.51496</td>
<td>.05757</td>
</tr>
<tr>
<td>Sat_rp</td>
<td>G9</td>
<td>80</td>
<td>3.1895</td>
<td>.51036</td>
<td>.05706</td>
</tr>
<tr>
<td></td>
<td>G10</td>
<td>80</td>
<td>2.9388</td>
<td>.48791</td>
<td>.05455</td>
</tr>
<tr>
<td>Sat_cr</td>
<td>G11</td>
<td>80</td>
<td>4.0406</td>
<td>.66761</td>
<td>.07464</td>
</tr>
<tr>
<td></td>
<td>G12</td>
<td>80</td>
<td>3.7870</td>
<td>.63231</td>
<td>.07069</td>
</tr>
<tr>
<td>Sat_oc</td>
<td>G13</td>
<td>80</td>
<td>3.9537</td>
<td>.70799</td>
<td>.07916</td>
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<tr>
<td></td>
<td>G14</td>
<td>80</td>
<td>3.6988</td>
<td>.62955</td>
<td>.07039</td>
</tr>
<tr>
<td>Gat_ge</td>
<td>G15</td>
<td>80</td>
<td>3.7258</td>
<td>.55214</td>
<td>.06173</td>
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<tr>
<td></td>
<td>G16</td>
<td>80</td>
<td>3.4680</td>
<td>.49709</td>
<td>.05558</td>
</tr>
</tbody>
</table>

*(Author’s conception)*

Table no. 7

**t TEST FOR SIGNIFICANT DIFFERENCES ESTABLISHMENT BETWEEN G1 (MILITARY) AND G2 (CIVILIANS)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>M_con</td>
<td>11.913</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Equal variances assumed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>M_exp</td>
<td>1.542</td>
<td>.216</td>
</tr>
<tr>
<td></td>
<td>Equal variances assumed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Sat_rp</td>
<td>308</td>
<td>.580</td>
</tr>
<tr>
<td></td>
<td>Equal variances assumed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Sat_cr</td>
<td>723</td>
<td>.397</td>
</tr>
<tr>
<td></td>
<td>Equal variances assumed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Sat_oc</td>
<td>1.393</td>
<td>.240</td>
</tr>
<tr>
<td></td>
<td>Equal variances assumed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Sat_ge</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*(Author’s conception)*
Discussions

The interpretation of the results went through two stages: the first stage, aimed at reporting the data obtained from research hypotheses regarding the relations between motivation and professional satisfaction among the military in group G1, and the second stage consisted in analyzing all statistically valid results and extracting all inferences relevant to the research topic.

For the first stage of analysis the following information was retained:

- In group G1 (military) the conditions under which satisfaction with leadership and interpersonal relationships of the military Sat_cr significantly correlates with the needs of work M_exp (r = 0.460; p <.001), and satisfaction with work organization and functional communication S_oc significantly correlates with the needs of accomplishment through work M_exp (r = 0.472; p < .001). Therefore, H1 hypothesis according to which the more satisfied they are with the management and the interpersonal relationships within the team, respectively of work organization and functional communication, the more the military have a higher motivation to accomplish themselves through work is supported.

- In group G1 (military) no significant correlation was found (r = 0.163) between salary satisfaction, rewards and career advancement opportunities S_rp and the needs of accomplishment through work M_exp. Consequently, the H2 hypothesis that the military with a high level of satisfaction regarding salaries, rewards and career advancement opportunities presents a high level, directly proportional, of their motivation to accomplish themselves through work is not supported.

- In group G1 (military) a significant correlation was found (r = 0.437; p <.001) between the general satisfaction S_ge and the needs of accomplishment through work M_exp. As a result, the H3 hypothesis according to which the military with a level high level of overall satisfaction show a high level, directly proportional, of their motivation to accomplish themselves through work variable, is supported.

- At the same time, the conditions under which, on the one hand, satisfaction with the work organization and communication S_oc_G1 (m = 3.9537) of the military is higher than that of civilians S_oc_G2 (m = 3.6988), and the difference between the averages of the two groups is statistically significant (t (158) = 2.407, p <.017) and, on the other hand, satisfaction with leadership and interpersonal relations of the military S_rp_G1 (m = 4.0406) is superior to that of the civilians S_rp_G2 (m = 3.7870), and the difference between the averages of the two groups is statistically significant (t (158) = 2.467, p <.015). Thus, H4 hypothesis, according to which the military have higher levels of job satisfaction and functional communication, respectively towards leadership and interpersonal relationships, compared to employees in civil organizations, is supported.

For the second stage, all valid results were analyzed statistically, and the relevant inferences were extracted. This secondary approach of interpretation led to a number of observations, which are presented below.

As employees of a military organization, G1 subjects (military) have a higher professional satisfaction than the subjects in the group G2 (civilians), employed in civil organizations. The observation is noted both in that regarding the general level of satisfaction S_ge (m = 3.7258 vs. m = 3.4680; t (158) = 3,103, p <.002), as well as in relation to each component, such as satisfaction regarding salary, rewards and career advancement opportunities S_rp (m = 3.1895 vs. m = 2.9388; t (158) = 3,176, p <.002), satisfaction with driving and interpersonal relations S_cr (m = 4.0406 vs. m = 3.7870; t (158) = 2.467, p < .015), respectively satisfaction with work organization and communication S_oc (m = 3.9537 vs. m = 3.6988; t (158) = 2.407, p <.017). The differences between the two groups are statistically significant.

As members of a highly hierarchically structured organization, the military have a higher level of power / leadership needs M_cond (m = 4.3526 vs. m = 3.9306; t (158) = 4.130, p <.001) and the needs of accomplishment by work M_exp (m = 4.6022 vs. m = 4.4319; t (158) = 2.101, p <.037) compared to the level of the employees in civil organizations. The differences between the two groups are statistically significant.

Regarding M_rel affiliation needs as well as basic needs of existence M_under the level of motivation of the two categories is similar in the two groups.

Although superior to civilians (m = 3.1895 vs. m = 2.9388), satisfaction regarding salaries,
rewards, and career advancement opportunities of the military $S_{rp}$, is however at a relatively low level, being statistically significantly lower than the satisfaction felt with other sources of satisfaction in their organization, respectively satisfaction with leadership and interpersonal relationships $S_{cr}$ ($m = 4.0406$), satisfaction with work organization and functional communication $S_{oc}$ ($m = 3.9538$), as well as to the general satisfaction $S_{ge}$ ($m = 3.7258$).

The military personnel who are satisfied with salaries, rewards, and career advancements opportunities are motivated by the needs of power, manifesting trends towards hierarchical ascension and leadership functions. The observation is supported by the fact that in group $G_1$, satisfaction regarding payments, rewards and career advancement opportunities $S_{rp}$ correlates significantly with power needs $M_{cond}$ ($r = 0.238; p < .033$).

The military who are equally satisfied with the way they are led by their superiors and the interpersonal relationships within the groups to which they belong develop a complex, strong motivation for work through activation of their needs for power / leadership, relationships, and subsistence. This one observation is supported by the fact that, in group $G_1$, satisfaction with driving and interpersonal relationships $S_{cr}$ within the group correlate significantly not only with the realization of needs through work $M_{exp}$, according to Hypothesis 1, which was confirmed, but also with the needs for power $M_{cond}$ ($r = 0.327; p < .003$), affiliation needs $M_{rel}$ ($r = 0.318; p < .004$) and basic living needs $M_{sub}$ ($r = 0.316; p < .004$). Also, the same complex and strong motivation for work, is activated and supported in the military by satisfaction felt towards work organization and functional communication within the unit. And this observation too is supported by the fact that in both groups significant negative correlations were recorded between age and level of education ($r = -0.410; p < .001$ in the military, respectively $r = -0.298; p < .007$ in civilians) and significantly positive correlations between age and occupation adequacy at education level of ($r = 0.411; p < .001$ in the military, respectively $r = 0.321; p < .004$ to civilians).

In the military, unlike civilian employees, job satisfaction is not influenced by age, gender, level of education or adequacy of position / function at instructional level because, in group $G_1$, none of demographic variables correlate with any of the satisfaction variables work. In comparison, for example, it is observed that civilians in group $G_2$ are better satisfied by salary, rewards and career advancement opportunities $S_{rp}$ as they occupy positions in accordance or higher than their level of instruction $M_{cond}$ ($r = 0.255; p < .022$), and women are satisfied, to some extent significantly higher than men, in terms of work organization and functional communication $S_{oc}$ ($r = -0.271; p < .05$).

As members of a relatively closed organization with a homogeneous organizational culture, which sometimes levels out individual attitudes and opinions, the military show a greater homogeneity of motivation (standard deviations smaller) than civilian subjects, the only exception being the basic needs of existence, where the situation is reversed.

The military appear to be more ambitious, more motivated for performance, more eager to achieve from a younger age ($m = 38.07; SD = 6.26$), compared to civilians ($m = 41.08; SD = 7.74$). This observation is also supported by the fact that in group $G_1$, age correlates inversely with power needs $M_{cond}$ ($r = -0.352; p < .001$), and with the needs of realization through work $M_{exp}$ ($r = -0.315; p < .004$).

As in the civilian environment, the military also find that some of them have a higher level of education, but also that they often occupy positions inferior to their respective training. The statement is supported by the fact that in both groups significant negative correlations were recorded between age and level of education ($r = -0.410; p < .001$ in the military, respectively $r = -0.298; p < .007$ in civilians) and significantly positive correlations between age and occupation adequacy at education level of ($r = 0.411; p < .001$ in the military, respectively $r = 0.321; p < .004$ to civilians).

**Conclusion**

This research aimed to study the relation between motivation and satisfaction of the personnel working in a military organization – in the defence, public order, and national security system.

First, we can confirm that similarly, for the staff
of military organizations, if employees are satisfied with the environment and working conditions, then they will also be motivated to work accordingly\textsuperscript{8,59,60}. A series of implications follows from here, such as: the need for a rational organization of the military activity; clear definition of tasks; ensuring optimal training and work conditions; achieving a stenic and supportive psychosocial environment; maintaining harmonious interpersonal relationships; building a modern and competent leadership\textsuperscript{61,62}.

Second, and in the case of military organizations personnel we may find that the overall satisfaction felt by employees leads to a strengthening of the sense of personal competence and self-efficacy, which in turn determines an increase in motivation for work and performance\textsuperscript{63,64,65,66}. The satisfaction of successful completion of the mission is the main fulfillment of a military, because it allows them to identify with the goals, values, and the customs of the organization, which guarantees its acceptance and integration in the group. This special satisfaction generates an interdependence between the individual and military organization, which helps activate a higher motivation for successful completion of missions, and subsequently performance will lead to further increase of personal prestige\textsuperscript{67,68,69,70}.

Third, military personnel, as opposed to civil organizations’ personnel, maintain a high motivation for performance even in periods of marked economic imbalances, and the level satisfaction is extracted from the proper perception of the manner of organization and communication, from the coherence of management and the intensity of interpersonal relationships or from military experience that may be valuable in the future\textsuperscript{71,72}. Also, the degree of motivation of the military, implicitly the level of satisfaction, emerges from the higher job stability, guaranteeing a relatively secure income, but also from the existence of multiple possibilities for advancement in professional career\textsuperscript{73,74,75,76}.

Fourth, we found that, for the military, compared to civilians, there is no direct relation between the level of satisfaction and rewards attractiveness, and these do not directly influence the valence and attractiveness of the rewards\textsuperscript{77,78}. In the military organizations, though material satisfaction is important, it is not decisive in the intimate economy of the motivation phenomenon at the individual level. Sources of military satisfaction, such as motivational leverage, seem to be related rather to the particular specifics of the managerial act, of the psychosocial environment, of the organizational culture, as well as the system of values and institutional norms\textsuperscript{29,80,81}.

Fifth, it is easy to see the relevance of the present study for designing human resources policies and specific managerial strategies in the military organization\textsuperscript{2,83,84}.

Finally, we trust that the present study, with all its limitations related to sampling, representativeness, analyzed dimensions, etc. contains the potential seeds for new research directions in the field of national security, which could support multiple psychological resources for the management of military personnel.

\textbf{NOTES:}


26 C.P. Alderfer, op.cit., pp. 142-175.


36 V.H. Vroom, op.cit.


57 Ibidem.
REFERENCES


