DEFENCE SCIENCE REVIEW

Analysis of emotional intelligence and its basic elements in teams building at the Vasil Levski National Military University

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A - Research concept and design, B - Collection and/or assembly of data, C - Data analysis and interpretation, D - Writing the article, E - Critical revision of the article, F - Final approval of the article

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Abstract

Objectives: This report presents the results of an empirical study conducted in a real environment at the Vasil Levski National Military University. The main goal is to establish the real state of the influence of interpersonal relationships in a group when building teams at the Vasil Levski National Military University, with a focus on the personality traits of employees, emotional intelligence and their manifestations in the work environment.

Results: The empirical research conducted shows that a large part of the respondents possess traits related to emotional intelligence, these indicators are a prerequisite for building effective teams based on emotional awareness, empathy and good communication.

Conclusions: Emotional intelligence plays a key role in creating cohesive and effective teams, its manifestation in interpersonal relationships contributes to increasing motivation, better conflict resolution and building trust between group members. With regard specifically to team building at the Vasil Levski National Military University, a state institution working in the field of security and defense, the studied personality traits are considered valuable and necessary.

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1. Introduction

Over the past decade, the challenges facing managers in effectively utilizing human resources and managing organizational behaviour have increased. Organizations are increasingly trying to find better ways to utilize and enhance the skills and abilities of their workforce, including by finding new ways to improve interpersonal interaction, communication, and teamwork skills. Today, there is growing agreement among scholars regarding the components of organizational behaviour, although there is still considerable debate about the relative importance of each: motivation, leadership behaviour, power, interpersonal communication, group structure and processes, perception, conflict, work design and work stress, change processes, and others. The literature review shows a multifaceted and in-depth study of man and human nature from the Middle Ages to the present day,but for our purposes we distinguish some of the literary sources used in the following areas:

- organizations, behaviour, structure, processes, organizational behaviour: Adler, N. (1986); Andreeva, M. (1998); Bauer, Talya, Berrin Erdogan (2012); Studocu.com. (2012); Gibson, James (2012); Kumar Mishra, Santosh (unprinted year); Newstrom, John W., Davis, Keith (1993); Robbins, SP, Judge, TA, Vohra, N. (2019), etc.;

- methods for studying the individual, group, collective, organization: Ivanov, Ivan (1999); Kant, R. (2019); Petrova, E. (2019), etc.;

- emotional intelligence, motivation, leadership, organizational culture: Mayer JD, Salovey P. (2004); Mladenova, I., Davidkov, T. (2023); Murmu S., Neelam N. (2022); Petrova, E. (2021); Tamsoy, D. (2023), etc.

The methodology for the study on the influence of interpersonal relationships in a group on team building at the Vasil Levski National Military University has been developed in accordance with the theoretical wealth contained in the sciences of management, human resource management, organizational psychology and organizational behaviour, considering the scientific and practical-applied world experience. Its main objectives of the current methodology are to establish and analyse the real state of interpersonal relations in a group, their influence on team building at the Vasil Levski National Military University. (Ivanov,1999); (Kant, 2019); (Petrova, 2019); (Adler, 1986); (Andreeva, 1998); (Gibson, 2012); (Robbins, Judge, Vohra, 2019); Petrova, E. (2021) The presented study is the first and only for the Vasil Levski National Military University - Bulgaria and such a study has not been conducted so far. The purpose of the study is to form a comprehensive assessment of different groups of indicators, study 3 groups of respondents and form a view on the problems in team formation, as well as their resolution.

In addition to the analysis of personality and individual behaviour studied through the possession of certain personality traits, the study currently examines and analyses the following issues: leading work values, work attitudes, emotional intelligence, work motivation, role in the group, influence of stereotypes in the workplace, own work ethics. In terms of the analysis of group behaviour and group dynamics, the following are currently being examined and analysed: the implementation of work roles in the work unit, basic group norms that must be observed when working in the work unit, stage of group development, assessment of the work unit as

a team, manifestations of group cohesion and group thinking, problems and in terms of motivation of personnel for work and performance of official duties, motivation methods used in the work unit or collective, elements in the group work environment and others. In a separate third module, a diagnosis of the organization and organizational behaviour is carried out, examining and analysing: management style in the organization, features of leadership presence, the hierarchical power structure, level of motivation for work in the organization, level of conflicts and conflict, acts of aggression in the work environment, the element of organizational culture, the need for organizational change, etc. This will give a much more complete picture of the situation in the dimensions – individual – group/collective/team – organization. Thereby, the current state of the already established collectives/work units or teams will be examined, the problem areas will be discovered, and certain solutions will be proposed.

2. Emotional intelligence – essence, content, purpose and methodology of the study

In the workplace, emotional intelligence can be used to form harmonious teams by taking advantage of each member's talents. To achieve this, colleagues who are well-versed in emotional intelligence can look for opportunities to motivate and inspire others to work together. People with high emotional intelligence have been found to have higher self-efficacy in dealing with adversity, perceive situations as challenges rather than threats, and have higher life satisfaction, which can help lower stress levels. (Mayer, Salovey, 2004); (Bauer and Erdogan, 2012); (Mladenova, Davidkov, 2023); (Murmu, Neelam, 2022); (Tamsoy, 2023) Salovey and Mayer developed the concept known as emotional intelligence in 1990. Individuals can be guided towards developing the qualities that will bring them success and enjoyment in life by developing their emotional intelligence. Therefore, the number of studies that attempt to measure emotional quotients has been increasing steadily in the past few years. (Mayer, Salovey, 2004)

Emotional intelligence includes:

- self-management – the ability to manage one's own emotions and impulses;

- self-motivation – the ability to persevere in the face of setbacks and failures;

- empathy – the ability to recognize and understand the emotional state of another person, the ability to successfully read and respond to people's emotions in management situations;

- social skills – the ability to create and maintain contacts, as well as social skills for instantly connecting with people and gaining their trust (Tamsoy, D., 2023).

3. Analysis and importance of emotional intelligence and its main elements in building teams at the Vasil Levski National Military University - results

The main goal of this study is to improve the effectiveness of organizational relationships and work in groups and teams, as a result of a study conducted in a real environment, analysis of the results of the study, and scientifically proven methods.

The study surveyed 160 employees from the Vasil Levski National Military University, of whom: 82 people – representatives of the academic staff; 58 people – representatives of the administrative staff and 20 people – representatives of the Professional Sergeants' College (PSC).

The survey was conducted in the period October 2024 – February 2025, with a questionnaire. The questionnaire used includes eight questions and aims to explore some basic personality characteristics that influence group performance and individual behaviour in the formation of groups and teams. Behaviour at the individual level is examined by examining values, attitudes, perceptions and decision-making; personality and emotions; competencies; needs, motivation and job satisfaction. The following types of analysis were used in the scientific study: graphical analysis using Excel and mathematical-statistical analysis of statistically significant differences using MATLAB.

The current study addresses the question: "Do or do not you possess the following traits characteristic of emotional intelligence: self-awareness; self-management; self-motivation; social skills?"

Personality traits characteristic of emotional intelligence were examined, such as self-awareness; self-management; self-motivation; social skills. The study is voluntary, therefore the distribution of the groups of employees who participate is uneven. The academic staff occupies 51% as part of the representative sample, the administrative staff – 36%, and the representatives of the PSC – 13% of the total respondents.

97% of the respondents believe that they possess self-awareness as a personal trait, 3% of the respondents cannot answer. Two representatives of the academic staff representatives did not answer the question, as did one representative of the academic staff representatives and one of the PSC representatives. A high level of self-awareness was observed in all groups, with no significant differences. Self-awareness is necessary for people to make better decisions and work well in teams.
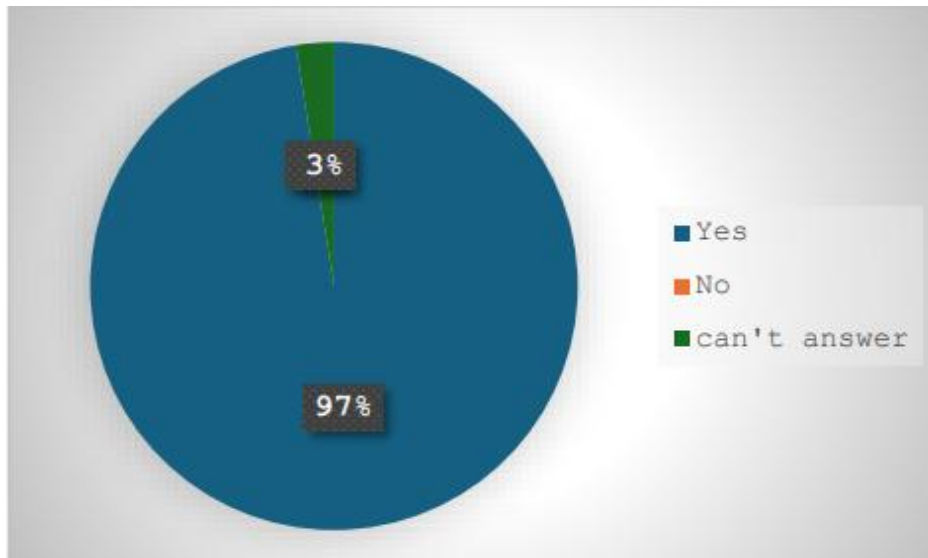
Fig. 1. Indicate whether you possess the following traits characteristic of emotional intelligence: self-awareness – total respondents

Source: own elaboration

The ability to control destructive emotions and actions and the tendency to stop and think before acting are two of the most important characteristics of emotional intelligence (Tamsoy, D., 2023). 98% of the total respondents answered categorically that they possess self-governance as a personality trait, 2% cannot answer the question posed. One representative of the academic staff does not answer the question posed, as does one of the representatives of the administrative staff. There are no significant differences in the studied groups regarding the comparisons of self-management.
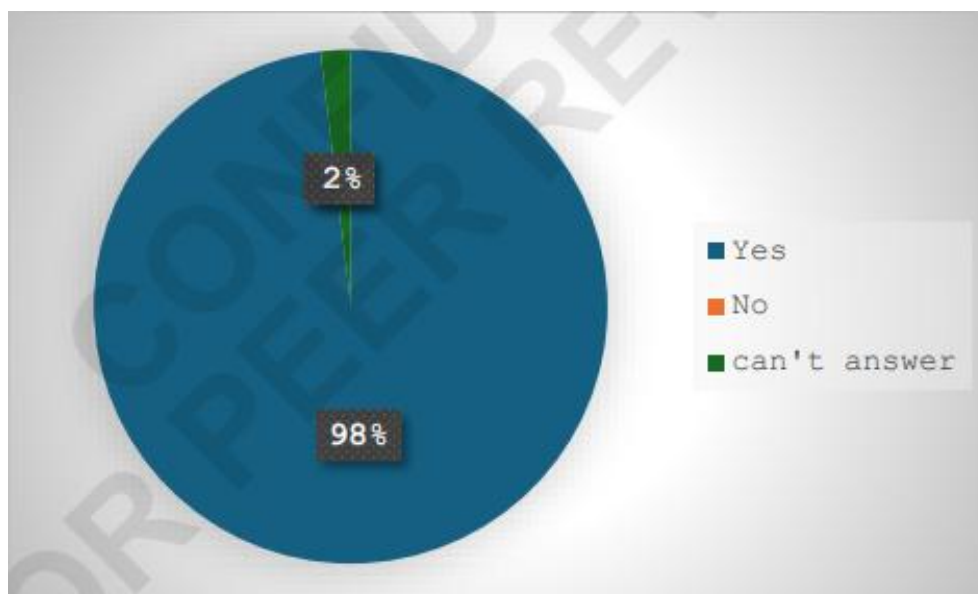

Fig. 2. Indicate whether you possess the following traits characteristic of emotionalintelligence: self-management – total respondents

Source: own elaboration

Self-motivation includes things like a sense of purpose, personal fulfilment, a thirst for knowledge, and the flow that comes from being completely absorbed in what you are doing. Characteristics include a relentless pursuit of excellence, an optimistic attitude even in the face of failure, and commitment to the group as a whole. (Tamsoy, D.,2023). In total, respondents answered that 94% of tchem possess the self-motivation trait, 4% indicated that they do not possess this trait, 2% could not answer. Four representatives of the academic staff answered that they do not possess the trait of self-motivation, 1 representative from the administrative staff and from the Professional Sergeant College answered that did not possess the studied trait. 2 representatives from the academic staff did not answer, as did 1 representative from the administrative staff and 1 representative from the PSC. In conclusion, we observe a relatively even distribution between the three groups.
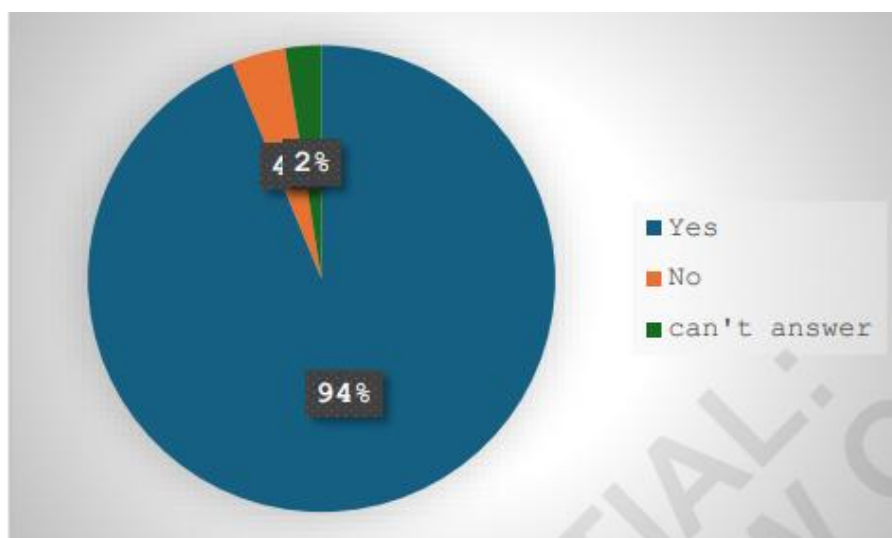

Fig. 3. Indicate whether you possess the following traits characteristic of emotional intelligence: self-motivation – total respondents

Source: own elaboration

Scientists who have studied the issue of emotional intelligence have found that those who can empathize with the feelings of others are more successful in their careers and other areas of life. When asked whether they possess the personality trait of empathy, 75% of the total respondents answered positively, 20% of the respondents indicated that they do not possess empathy, 5% could not answer. The distribution of the answer to the question by groups is as follows: 67 of the surveyed representatives of the academic staff answered that they possess empathy, 17 did not possess empathy and 3 could not answer. 47 representatives of the administrative staff answered that they possess empathy, 8 did not possess empathy and 3 could not answer. The representatives of the PSC answered as follows: 11 possessed empathy, 7 did not possess empathy and 2 could not answer. In conclusion, those representatives with higher sensitivity to others are representatives of the Academic and Administrative staff. The respondents from the Professional Sergeant College show lower empathy towards others.
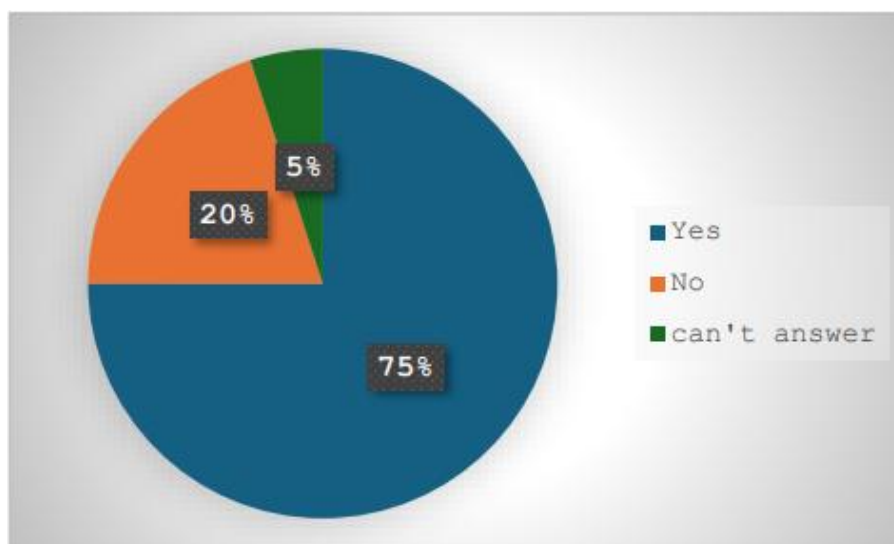
Fig. 4. Indicate whether you possess the following traits characteristic of emotional intelligence: empathy – total respondents

Source: own elaboration

The high percentage of those who reported having social skills as a trait characteristic of emotional intelligence suggests that strong social skills are characterized by the ability to work productively in a team. In total, the respondents answered that 94% have social skills, 4% indicated that they do not have social skills, 2% could not answer. The distribution of the answer to the question by groups is as follows: 76 of the surveyed representatives of the academic staff answered that they have social skills, 4 did not have social skills and 2 could not answer. 55 representatives of the administrative staff answered that they have social skills, 2 did not have this trait and 1 could not answer the question. The representatives of the Professional Sergeant College answered as follows: 11 possessed empathy, 7 did not possess empathy and 2 could not answer. In conclusion, the social skills are relatively evenly distributed across the three groups.
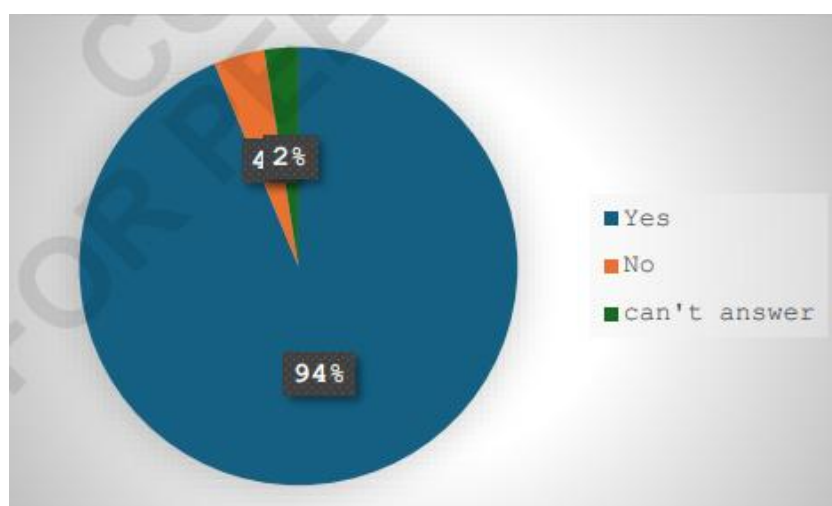

Fig. 5. Indicate whether possess the following traits characteristic of emotional intelligence: social skills – total respondents

Source: own elaboration

Discussion

The present study confirms the key role of emotional intelligence in the processes of building effective teams in the organization and specifically the importance of the personality traits: self-awareness; self-management; self-motivation; social skills. We realize that there is a possibility of a certain subjectivity in the answers to the questions, but at the same time the results should be interpreted not so much from the point of view of possession or non-possession of the mentioned personality traits characteristic of emotional intelligence, but rather as the enormous importance given to the personality traits characteristic of emotional intelligence and, accordingly, the enormous importance given to it itself. The actual results could be interpreted from the point of view that for a significant percentage of the surveyed respondents, organized in teams, emotional intelligence is an important personality trait, valued in teams and contributing to harmonization, conflict-free work and a calm working atmosphere. Specifically, regarding team building at the Vasil Levski National Military University, a state institution working in the field of security and defence, the personality traits studied are considered valued and necessary.

Conclusion

In conclusion, the results are as follows:

- 97% of respondents believe that they have "self-awareness" as an individual trait;

- 98% of respondents believe that "self-management" is inherent to them as an individual trait;

- 94% of respondents believe that "self-motivation" is inherent to them as an individual trait;

- 75% of respondents believe that empathy is inherent to them;

- 94% possess the social skills necessary for their job.

The empirical research data clearly shows that interpersonal relationships in the organization have a strong impact on cohesion, communication and teamwork in teams. The results emphasize the need to develop emotional intelligence not only at the individual but also at the group level to improve organizational culture and achieve higher productivity. Considering the results of the survey by the organization's management in the processes of selection, training and development of personnel would help for creation of balanced and effective teams.

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