

DEVELOPING SCENARIOS FOR THE VIRTUAL SIMULATION OF MORAL DILEMMAS

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Abstract: *The paper presents a preparatory phase of a more ample research project: designing an interactive educational software meant to support the development of the leadership competences of the military students. This software could be used by future military leaders for practicing different ways to approach and solve moral dilemmas. The first phase of the project refers to designing a set of scenarios of some professional situations with controversial moral potential. We were focused on the relationships in the military, the ways of exercising leadership in different contexts, and the decisions making process in case of ambiguous ethical conditions. In order to set some possible courses of action for the interactive virtual simulations, we conducted a qualitative research on the ground, applying structured interviews. At first we collected a lot of stories related to the leadership in Romanian Army, and then we made a qualitative analysis of them, using the Atlas.ti software. These led us toward several suggestions and clues concerning the moral values which should guide the virtual scenarios. Likewise, there were outlined some alternatives for splitting the possible course of action in the key points. In the next stage of the project, the scenarios shall be validated through the focus group method, in order to strengthen their veracity and their scientific basis, before converting them into an effective virtual simulation.*

Keywords: *moral values, moral dilemma, military leadership*

1. Introduction

In the social relationships, generally speaking, individuals can be often found in the hypostasis of moral subjects, no matter the activity they perform and the circumstances of their life. People act by mobilizing their moral forces, which were previously internalized due to the interaction with the set

of *moral values of the society* to which they belong. The contradictory aspects of the social morality and the distortions that occur in the process of its internalization generate a special psychological construct, named *the individual morality*.

This paper presents a part of a more ample research activity, developed in order to support teachers, officers and military instructors from the Land Forces Academy in their curricular and extra-curricular activities aimed at forming future professional officers. The main purpose of the broad research project is the implementation of effective strategies for military students' character development, in order to increase the quality of human resources in the Romanian Army.

The starting point of the study is the finding that, during the period of training in academy, military students are not fully aware of the ethical implications of some of their future decisions as officers, in a military context. Despite the fact that they are not yet perfectly aware of the requirements, military leaders will have to act like moral guides for their subordinates, taken as individual and as a military subunit.

It is known that the psychological mechanisms which support students' readiness for exercising the military leadership role cannot be entirely built within the formal curricular activities that are currently planned in the military academy. Therefore, topics that target the strengthening of the moral profile of military students should be addressed in different educational contexts, even outside the classes. This is desirable because the topics are very diverse and offer ongoing opportunities for discussions, for sharing experiences, for building positive attitudes and positive moral values, for anticipations of the decisions to be taken in challenging professional contexts. Through a research project in progress at the institution level it aims to create a database of consistent and coherent scenarios (cases) of some moral dilemmas involved in the decision making process in the military. This is a preparatory phase for a subsequent more ample demarche: designing an interactive educational software, meant to be used in educational activities based on virtual simulations, aiming at developing the moral profile and the leadership potential of the military students. The software application could be accessed by students both independently and during the educational activities led by teachers, officers or military instructors. This database will include a lot of scenarios of professional situations (cases, incidents) with controversial moral potential, focused on the relationships in the military, the exercise of leadership, or the decisions making process in case of moral ambiguity.

2. Aim

The purpose of this study is the developing of some courses of virtual actions, characterized by coherence, internal and external consistency, and representativeness for ethical dilemmas frequently faced by Romanian officers in their professional duties, in peacetime and during military missions. To develop the possible courses of action, it is necessary to collect a set of relevant data about Romanian Army, and then to process data and to set some logical connections between categories of outcomes (cause-effect, opposition, consequence, alternative, etc.). It has pursued that the possible scenarios of virtual simulations to describe typical professional situations, with a high incidence in the military leaders activity. Thus will be ensured the educational relevance of the interactive software application, inasmuch as will enable students an early confrontation, whilst are still in training, with the realities of life and activity in the Romanian military units. The topics of virtual simulations will be chosen based on the stories told by the professionals during the interviews. So, there is a high probability for future real confrontation of the students with this kind of situations, in their future career. Due to its interactivity, the application could be used both for early awareness of some professional situations with ethical implications as well as for practicing leadership and improving the decision-making skills.

3. Theoretical frame

A *dilemma* arises when a judgment contains two contrary or contradictory solutions for a problem, and only one of these can be chosen, despite the fact that both will produce almost the same result. This term indicates the situation where a person has to choose between two possible perspectives almost identical. The dilemma is a form of hypothetical syllogism.

A dilemma becomes *ethical* (or *moral*) when “two values or sets of ethical values come into conflict and when both alternatives can cause distress, irrespective of the chosen course of action” [1]. This idea belongs to the authors of a manual for officers’ training to make “tough decisions” during the missions accomplishing, in the situations of risk and uncertainty.

An *ethical dilemma* could be defined as a conflict between:

- Personal and professional values;
- Two or more values or ethical principles;
- Various possible courses of action in a particular situation, each of them being supported by equally important reasons (whether favorable or unfavorable);
- Two unsatisfactory alternatives;

- Moral values of a person and the social or professional role that is to perform.

The typology of ethical dilemmas is diverse, a relevant synthesis being carried out by the authors of the military manual mentioned above [2]:

- The *uncertainty dilemma* - represents the most common type of ethical dilemma, that refers to a problematic situation where “the right thing to do” is not clear. There is not a simple choice between right and wrong. There are equally valid reasons in support of two or more possible solutions to solve the dilemma. For example, in a military operational environment, taking action to stop corruption is not an obvious and simple solution because it may result more corruption.

- The *competing values dilemma* - involves a situation in which different ethical values support some competing courses of action. For example, an option involving loyalty to a superior may compete with an option involving the professional integrity.

- The *harm dilemma* - is a situation in which any possible solution will cause harm or injury to somebody. This type of dilemma is often described as a “lose-lose situation”. For example, in military operations, the possibility of harming civilians trying to protect the own subordinates is sometimes an inevitable situation.

- In certain circumstances, dilemmas are deemed *personal* - the course of action (right or wrong) is clear, but the personal values (self-justice, friendship etc.) or self-interest contribute to the difficulty of acting in those circumstances. Despite the fact that a personal dilemma does not always becomes an ethical dilemma, that type of situation is nonetheless difficult. For example, the reporting to superiors about an inappropriate behavior of a colleague is ethically correct, but this will create tension in the work environment and even teasing from peers. However, on a personal level, it remains a difficult choice between action and non action, when both could have negative consequences.

One of the aims of the military education is to develop individual's ability to recognize a moral dilemma and to react promptly when facing it. In this context, the development of the skills for solving moral dilemmas can be done by considering different philosophical approaches of ethics, evaluating the historical consequences of certain decisions and moral issues, or discussing current moral dilemmas faced by different people.

A lot of studies have focused on identifying the steps of ethical decision process and some factors that influence it. They have pursued the providing of some effective tools for educators, leaders, institutions and communities, which can be successfully used in approaching and solving ethical matters. The current studies are built on the work of renowned researchers and

scholars, whose theories and models remain milestones in the field. Thus, Jean Piaget's [3] researches gave rise to the development of Lawrence Kohlberg's moral development theory, to which are related all explanatory models of the moral decision process.

We shall briefly present some of the most prevalent explanatory models that currently guide the training and the improvement of individuals' moral profile:

- *The theory of moral development*, elaborated by Lawrence Kohlberg [4] (people usually pass through a succession of levels, stages and sub-stages to build their moral profile: pre-conventional morality, conventional morality, post-conventional morality);

- *The model of the ethical decision*, elaborated by James Rest [5] (an ethical decision is based on four distinct psychological processes: moral sensibility (moral consciousness), moral judgment (moral reasoning), moral motivation (moral intention), moral courage (moral action). The failure of each of these components will lead to the failure to the whole process of ethical decision;

- *The model of moral intensity*, elaborated by Thomas Jones [6] (there are six dimensions of moral intensity: magnitude of the consequences, temporal rapidity, social consensus, proximity, probability of effect, concentration of effect);

- *The intuitionist model of moral conduct*, elaborated by Jonathan Haidt [7] (evidence suggests that most of human moral decisions and daily moral behaviors are intuitive; moral reasoning is an act of thinking that take place later, after the intuitive behavior).

4. Methods

The research was developed based on the qualitative methodology. The option for qualitative research could be justified using Alex Muchielli's statement: „The human behavior can be understood and explained only in relation with the meaning that people give to their things and actions” [8]. Thus, data collection was based on interview. The subjects' answers and narrations were recorded in digital format.

The subjects were asked to use their professional experience for recounting a story, a situation or a series of events to which they attended. The topic must be focused on a military leader which faced a moral dilemma and was in the situation to make a difficult decision. The main questions that guided the subjects throughout the interview were the following:

- *When, where, under what circumstances the event/story happened, who were the participants?*

- *What was the nature of the incident, how the facts evolved?*

- *What was the moral dilemma faced by the leader and which were the alternatives of his decision?*
- *What decision he made?*
- *What were the consequences (positives and negatives) for the leader himself and for the subordinated, pairs or superiors?*

Research sample consisted of 26 subjects. We have chosen officers with at least 3 years of leadership experience at the helm of military detachments, belonging to different military branches and specializations from military units throughout the country. 24 of the subjects were male and 2 females, aged between 25 and 44 years, and 11 of them had military experience in the operational multinational theaters from abroad. The interviews were only audio recorded, so the subjects were kept anonymous.

In the literature and in the scholars' debates on the scientific character of qualitative research it is questioning the very existence of sampling in the qualitative research, and also the representativeness of the cases or the subjects. Uwe Flick [9], a specialist in qualitative research, argues that sampling really exists in these researches and different types of selection are done repeatedly: *to the data collection phase* (when the cases for investigation or the group of subjects are selected), *to the data interpretation phase* (when the material that will be analyzed, processed and interpreted is selected from all data collected; the selection inside the study material; the selection of the theory and the coding procedures; the selection of codes and categories of content) and *to the presentation of results phase* (from all the results of analysis and interpretation, some relevant and important ideas are selected to be presented). The above mentioned author specifies that the decisions of choosing and combining the empirical material (cases, groups etc.) are taken along the way, on the ground, in the process of data collection and interpretation.

The fact that the qualitative research is not working with the concept of statistical representativeness of the sample brought a vehement criticism. This leads some experts to the conclusion that the results of a qualitative research can never be generalized and therefore this type of research is not scientifically valuable. However, qualitative researchers provided a lot of counterarguments to this view, as are those given by Elisabeta Stănciulescu [10]: (1) the first counterargument is that the generalization is not always the target of knowledge in the social field. Sometimes the researcher is interested in a singular case, in a particular group or even in an individual. The subject is often studied for itself, for its exceptional status. Sometimes it is interested to find out if a particular practice or habit can be replicated or transferred to other social areas. Not representativeness is important, but exemplarity and the experience of success (or failure). (2) The second counter-argument could

be that, in fact, researchers can make generalizations even starting from qualitative research, because the qualitative sampling is linked to the concept of theoretical relevance. This means that one can choose a sampling unit or another depending on the size of the object of theoretical research. It is about the representativeness related to the purpose (not to the population) and about theoretical generalization.

Whether the arguments of specialists on sampling and representativeness can be considered convincing, a question arises: how big should be the sample in qualitative research? The answer is simple: there is not a rule, but the decision is taken according to the research purposes. During the demarche, the researcher may decide to stop collecting data in some particular situations: when he has no more time or resources; when the data begins to repeat itself or to be redundant; when he notes that no matter how various the cases are, not get any new data (empirical saturation); when he already obtained a coherent and consistent theoretical model of the issue (theoretical saturation). Some researchers believe that data saturation usually occurs after 30 cases investigated.

5. Results

During the investigation, 26 interviews audio records were collected, then they were divided according to the content of the stories and thus 65 *Primary documents* (PD) resulted. All those represented the row data of the research, and they were introduced in ATLAS.ti program (software specialized in processing qualitative data).

Later, the coding process was done for each audio record that was added to the application as primary document. From the 65 PD-s there were obtained 117 pieces of content (*Quotations*), which were bounded following, as far as possible, the logic of each story told by the research subjects: context, moral dilemma, decision, reasoning/argumentation, and consequences of the decision. At their turn, the quotations were grouped into families of fragments (*Quotations Families*), depending on the common topics of narrations.

Subsequently, all fragments of documents (*Quotations*) have been associated to *codes*, as semantic entities with suggestive and brief name. Overall there were established 115 codes. Regarding the coding procedure, we have to specify that for each fragment of material (*quotations*) can be assigned one or more *codes*, and also a code can be assigned to several fragments with a similar semantic content.

In the following print-screen it can be seen the configuration of the data in ATLAS.ti application:

Codes	Id	Name	Primary Doc	Codes	Size	Start	Density	Author
Show all Quotations	1121	26_4_umarile.mpg	26_4_umarile.mpg	presiunea grupului pentru indepartarea abaterilor, rezolvare cu bine	0:00:23.15	0:00:00.00		2 Stefi
abateri grave de la regulamente (5-5)	1122	26_4_umarile.mpg	26_4_umarile.mpg	decizie rationala, regulamentara, efecte peste timp, leadership transactional, liderul nu c...	0:01:14.76	0:00:22.76		7 Stefi
abateri repetate (4-8)	1131	15_1_situatia si decizia.mpg	15_1_situatia si decizia.mpg	abateri repetate, intamplare nefericita	0:00:43.16	0:00:00.00		2 Stefi
adevarul iiese la iveala (1-1)	1132	15_1_situatia si decizia.mpg	15_1_situatia si decizia.mpg	alternative nefericite, cautare vinovati, dilema morala a liderului	0:00:13.05	0:00:43.16		3 Stefi
alternative nefericite (6-4)	1133	15_1_situatia si decizia.mpg	15_1_situatia si decizia.mpg	asumarea deciziei, decizie imorala, masuri pentru ameliorarea situatiei, pedepsirea vinov...	0:01:12.63	0:00:56.21		6 Stefi
altruism/egoism (10-16)	1141	15_2_dilema.mpg	15_2_dilema.mpg	retragerea privilegiilor	0:00:15.14	0:00:00.00		1 Stefi
asumarea deciziei (6-3)	1142	15_2_dilema.mpg	15_2_dilema.mpg	decizie imorala, efectele deciziei, nemulțumire, frustrare, pedepsa colectiva	0:00:26.33	0:00:15.14		4 Stefi
atributi indeplinite prin cumul (4-2)	1143	15_2_dilema.mpg	15_2_dilema.mpg	alternative nefericite, asumarea deciziei, efecte negative, gresala, reactie negativa a sub...	0:00:36.11	0:00:41.48		5 Stefi
barbatii acorda privilegii femeilor (2-1)	1151	15_3_umarile.mpg	15_3_umarile.mpg	efecte negative, nemulțumire, frustrare, reactie negativa a subordonatilor	0:00:22.98	0:00:00.00		3 Stefi
binetele subordonatilor (5-3)	1152	15_3_umarile.mpg	15_3_umarile.mpg	decizie imorala, seful nu recunoaste ca decizia e gresita	0:00:29.87	0:00:22.98		2 Stefi
calitati umane, trasaturi pozitive de caracter (4-2)	1161	21_1_situatia.mpg	21_1_situatia.mpg	atributi indeplinite prin cumul, functie si atributi de comanda, lipsa de experienta, sarci...	0:00:24.26	0:00:00.00		4 Stefi
cautare vinovati (5-4)	1162	21_1_situatia.mpg	21_1_situatia.mpg	circumstante grave, functie si atributi de comanda, intamplare nefericita, militarii se atla...	0:00:57.32	0:00:24.26		5 Stefi
cedarea la presiunea sefului (4-6)	1171	21_2_dilema.mpg	21_2_dilema.mpg	cautare vinovati, circumstante grave, masuri pentru ameliorarea situatii	0:00:30.93	0:00:00.00		3 Stefi
circumstante grave (4-3)	1172	21_2_dilema.mpg	21_2_dilema.mpg	abateri grave de la regulamente, final fericit, gresala	0:00:23.09	0:00:30.92		3 Stefi
coeziunea grupului este mare (6-2)	1173	21_2_dilema.mpg	21_2_dilema.mpg	dilema morala a liderului, seful respecta regulamentul	0:00:15.04	0:00:54.11		2 Stefi
coeziunea grupului scazuta (2-2)	1181	21_3_evolutia.mpg	21_3_evolutia.mpg	binetele subordonatilor, competenta profesionala, decizie emotionala, dilema morala a lid...	0:00:21.60	0:00:00.00		7 Stefi
colaga femeie (3-4)	1182	21_3_evolutia.mpg	21_3_evolutia.mpg	abateri grave de la regulamente, conflicte cu subordonatii, ezitarea in luarea deciziei, lid...	0:00:44.29	0:00:21.60		8 Stefi
colégi doresc sa-si faca dreptate singuri (1-0)	1183	21_3_evolutia.mpg	21_3_evolutia.mpg	liderul isi schimba decizia, subordonatii nu inteleg gravitatea faptelor, subordonatii nu isi a...	0:00:31.73	0:01:05.89		3 Stefi
colégi sunt nemulțumiti (4-0)	1191	21_4_decizia.mpg	21_4_decizia.mpg	pedepsirea vinovatilor	0:00:13.39	0:00:00.11		1 Stefi
competenta profesionala (5-1)	201	21_5_explicatii.mpg	21_5_explicatii.mpg	calitati umane, trasaturi pozitive de caracter, decizie rationala, regulamentara, ezitarea in...	0:01:17.66	0:00:00.00		4 Stefi
conflicte cu colegii (1-4)	202	21_5_explicatii.mpg	21_5_explicatii.mpg	calitati umane, trasaturi pozitive de caracter, dilema morala a liderului, efecte peste timp	0:00:39.32	0:01:17.76		3 Stefi
conflicte cu subordonatii (5-0)	211	12_1_grija fata de subordonati.mpg	12_1_grija fata de subordonati.mpg	functie si atributi de comanda, minimizarea importantei respectarii regulamentului, ne...	0:00:54.22	0:00:00.00		3 Super
conflicte cu superiori (2-4)	212	12_1_grija fata de subordonati.mpg	12_1_grija fata de subordonati.mpg	suprasolicitare	0:00:43.34	0:00:54.42		1 Super
considera ca privilegii li se cuvin (3-4)	213	12_1_grija fata de subordonati.mpg	12_1_grija fata de subordonati.mpg	binetele subordonatilor, coeziunea grupului este mare, conflicte cu superiori	0:00:23.18	0:01:37.76		3 Super
constientizarea pericolului (2-4)	214	12_1_grija fata de subordonati.mpg	12_1_grija fata de subordonati.mpg	calitati umane, trasaturi pozitive de caracter, discrepanta intre situatia oficiala si cea reala...	0:01:09.47	0:02:00.95		3 Super
corectitudine, imparțialitate (3-0)	215	12_1_grija fata de subordonati.mpg	12_1_grija fata de subordonati.mpg	seful ia partea subordonatilor	0:00:26.63	0:03:10.42		1 Super
decizia este impusa de seful mai mare (1-0)	221	12_2_umarile.mpg	12_2_umarile.mpg	binetele subordonatilor, coeziunea grupului este mare, seful nu respecta greselile sefilor sai	0:00:19.52	0:00:00.00		3 Super
decizie imorala (11-1)	222	12_2_umarile.mpg	12_2_umarile.mpg	competenta profesionala, decizie rationala, regulamentara, functie si atributi de coman...	0:00:41.52	0:00:19.51		4 Super
decizie rationala, regulamentara (5-1)	223	12_2_umarile.mpg	12_2_umarile.mpg	exista alternative viabile, grija fata de oameni	0:00:21.01	0:01:01.08		2 Super
dilema morala a liderului (9-2)	231	16_3_situatia.mpg	16_3_situatia.mpg	seful constata un furt	0:00:18.85	0:00:00.00		1 Super
disciplina/indisciplina (9-9)								
discreditarea sefului mai mare in fata subordonatilor (1-1)								
discrepanta intre situatia oficiala si cea reala (7-3)								

Using semantic and logical criteria, the codes were grouped in 12 *Codes Families*, which were organized and named taking into consideration the essential *social* and *moral values* that govern the situations reported by research subjects:

- Altruism / Selfishness
- Honesty / Dishonesty
- Professional Competence /Incompetence
- Conformity / Nonconformity
- Courage / Cowardice
- Duty
- Dignity / Humiliation
- Discipline / Indiscipline
- Equality / Discrimination
- Trust / Distrust
- Loyalty / Betrayal
- Responsibility / Irresponsibility

For example, the family of codes called *conformity/nonconformity* resulted from the grouping of 15 codes. Some of these particular codes take part of other codes families too, at the same time, as follows:

Families	Name	Grounded	Density	Author	Created	Modified	Families
altruism/egoism (16)	abateri grave de la regulamente	5	5	Stefi	01.12.20...	07.12.20...	cinste/necinste, conformism/ nonconformism, disciplina/indisciplina, responsab...
cinste/necinste (17)	abateri repetate	4	8	Stefi	01.12.20...	07.12.20...	cinste/necinste, conformism/ nonconformism, demnitate, disciplina/indisciplina...
competenta profesionala (22)	cedarea la presiunea sefului	4	6	Stefi	30.11.20...	07.12.20...	conformism/ nonconformism, curaj/lasitate, demnitate, responsabilitate/respon...
conformism/ nonconformism (15)	colegii doresc sa-si faca dreptate singuri	1	0	Super	07.12.20...	07.12.20...	conformism/ nonconformism
curaj/lasitate (12)	conflicte cu colegii	1	0	Super	07.12.20...	07.12.20...	conformism/ nonconformism
datorii (10)	decizie rationala, regulamentara	5	1	Stefi	01.12.20...	07.12.20...	competenta profesionala, conformism/ nonconformism
demnitate (17)	glume colegiale	1	1	Super	07.12.20...	07.12.20...	conformism/ nonconformism, disciplina/indisciplina
disciplina/indisciplina (9)	insubordonare	2	8	Stefi	01.12.20...	07.12.20...	conformism/ nonconformism, demnitate, disciplina/indisciplina, loialitate/tradare
egalitarism/discriminare (1,2)	liderul nu cedeaza la presiunea sefului ierarhic	1	1	Stefi	01.12.20...	07.12.20...	conformism/ nonconformism, curaj/lasitate, demnitate
incredere/incredere (6)	minimizarea importantei respectarii regulamentului	3	4	Stefi	30.11.20...	07.12.20...	conformism/ nonconformism, responsabilitate/responsabilitate
loialitate/tradare (1,2)	presiunea grupului pentru indreptarea abaterilor	1	1	Stefi	01.12.20...	07.12.20...	conformism/ nonconformism
responsabilitate/responsabilitate (20)	presiunea sefului mai mare	3	4	Stefi	30.11.20...	07.12.20...	conformism/ nonconformism, curaj/lasitate, demnitate
	procedura regulamentara	9	8	Stefi	30.11.20...	07.12.20...	cinste/necinste, competenta profesionala, conformism/ nonconformism, discipli...
	seful respecta regulamentul	2	2	Stefi	30.11.20...	07.12.20...	competenta profesionala, conformism/ nonconformism
	subordonatii executa ordinul comandantului	4	5	Stefi	30.11.20...	07.12.20...	competenta profesionala, conformism/ nonconformism, disciplina/indisciplina, l...

After the developing and strengthening the research database using foregoing procedures, the collected data were processed.

We started with the identification of the issues with the highest incidence in the stories told by the subjects. Then, it was established their degree of association with the social or moral values that were previously declared relevant. Thus, the scenarios with the highest and the lowest scores of certain social and moral values became trackable, as can be seen in the following table:

Code-Filter: All [115]

PD-Filter: All [65]

Quotation-Filter: All [117]

PD FAMILIES CODES FAMILIES	Cumulating responsabilitie	Woman leader	Military women	Jokes at working places	Insubordination	Popular leader	Chief protégé	TOTAL
Altruism / Selfishness	2	4	14	2	5	3	2	32
Honesty / Dishonesty	1	5	13	2	7	2	5	35
Professional Competence/ Incompetence	5	5	7	2	8	2	3	32

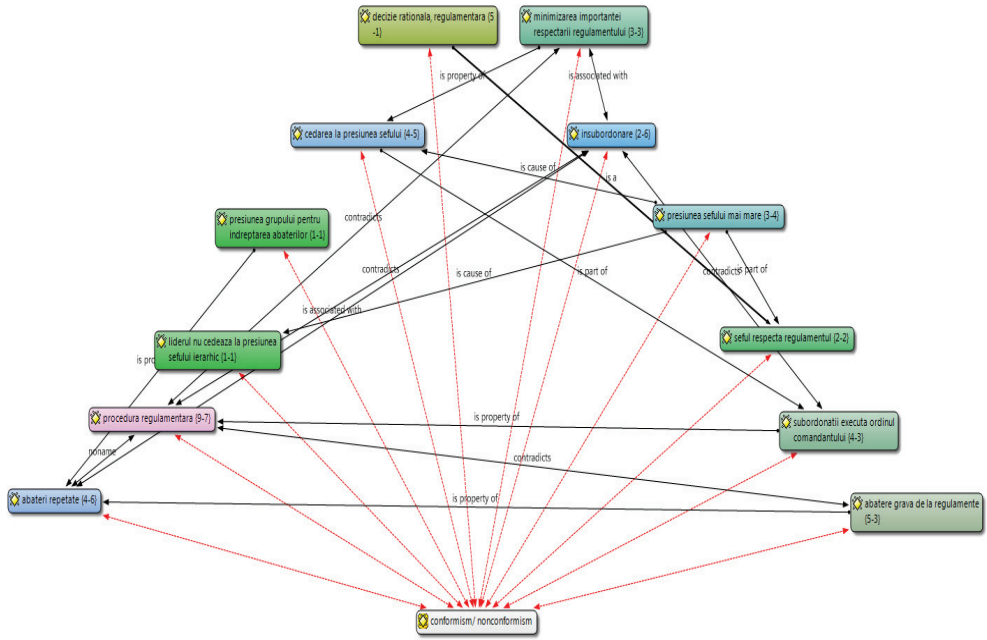
Conformity / Nonconformity	0	2	5	3	7	2	3	22
Courage / Cowardice	1	3	5	3	6	0	3	21
Duty	3	3	2	1	2	3	1	15
Dignity / Humiliation	2	5	9	3	7	0	3	29
Discipline / Indiscipline	1	3	5	3	6	0	1	19
Equality / Discrimination	2	2	10	2	2	0	2	20
Trust / Distrust	1	3	3	1	4	4	1	17
Loyalty / Betrayal	2	5	2	1	4	3	2	19
Responsibility / Irresponsibility	1	4	14	2	5	2	6	34
TOTAL	21	44	89	25	63	21	32	295

Same procedures were applied to identify the degree of association between *codes* and *quotations*, in order to determine different possibilities for future development of scenarios. These led as toward several suggestions concerning the main nodes for action ramification in the decisions points, and the possible ways of ramification of each scenario according to the scores. We applied the *codes co-occurrence* function, selected from the data analysis tools provided by Atlas.ti software. After that, the data could be outlined as graphic networks, depending on the index of significance, in order to support an easier perception of possible configurations of virtual simulation scenarios.

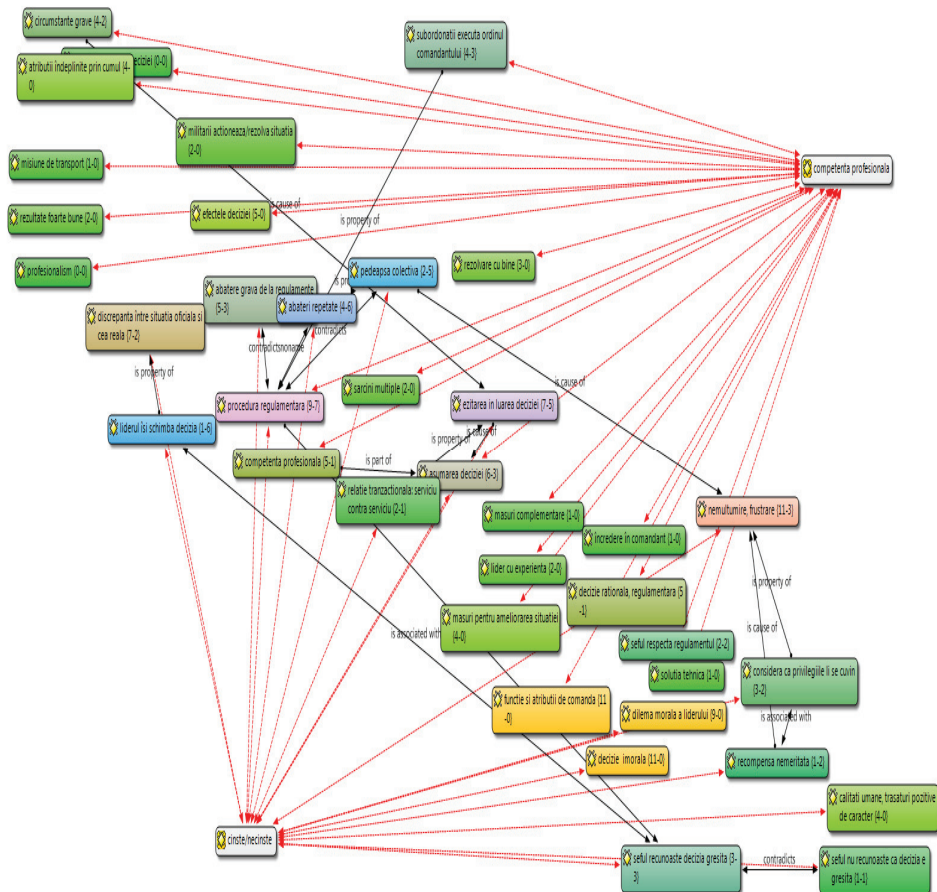
The next step was to establish the relations between the main network hubs (codes or families of codes). The categories of relationship were the following:

- *It is associated with ...*
- *It is part of ...*
- *It is cause of ...*
- *It contradicts ...*
- *It is equal to ...*
- *It is a property of ...*
- *No relation with ...*

To illustrate these relationships, we provide a visual representation of the pair of values named *conformity/nonconformity*, and their subordinated codes and relationships. We note that the color options were done by the software to indicate the intensity of the codes presence in relation to the chosen moral values:



It was very useful to plot in the same scenario the potential interactions between two or many moral values. In the next figure are represented the interactions between the value named *professional competence* and the pair of values *honesty/dishonesty*:



By entering more values on the same network, it was possible to create the increasingly complex scenarios, because life situations are never simple and linear, as could results from networks built around only one pair of values. Moreover, the combining of multiple values in a single network highlights the common codes.

6. Final remarks

The interviews revealed that conflicts between personal values and also moral dilemmas can occur any time in the professional life of any military leader. Some cases seem to be less difficult than others, when we read about them on a piece of paper, but the protagonists are deep involved in the provocative events on the ground. We must also take into account the fact that, in real situations, officers rarely have enough time to consider all the alternatives or to gather all necessary information. In case of ambiguity, the decisions are often made under pressure.

This study has suggested that the life difficulties result less from the moral values or moral norms that lead a particular community (the military organization, in our case), and more from the way they are implemented. The existence of values and the awareness of them generate duty, obligation and compliance for the militaries.

The ethical aspects of some decisions made by military leaders are given less by their content and more by the way they decide the behaviors. The ethical dilemmas and the ethical reflections of military leaders occur not only in crisis situations, when the circumstances are serious and the consequences of the decisions could be disastrous for those involved. Dilemmas arise also in daily situations, when the rules and procedures of action are questionable. The relationship between the decision-maker and the ethical issue is essential, and involves the relationship with self, the relationship with others (subordinates, colleagues or leaders) and the relationship with the military organization, customs and culture.

In this first phase of the research project, it was created a consistent database and multiple scenarios of action were analyzed, combined and enriched. This was a preparatory step for further development of the interactive educational software. In a later phase of the project, the scenarios must be validated using the focus group method, in order to strengthen their veracity and their scientific basis, before converting them into an effective virtual simulation. It is going to need the participation of other experienced officers and leaders, willing to examine the veracity of the scenarios, to intervene with critical comments, to indicate the unlikely courses of action or to verify the genuineness of the scenarios for the Romanian military organization.

References

- [1] ***Ethics in Canadian Forces. Making Tough Choices, Canadian Forces Leadership Institute, 2006, p.12.
- [2] *Ibidem*, pp.12-13.
- [3] J., Piaget, Judecata morală la copil, Codex Publishing House, 2012.
- [4] L., Kohlberg, Essays on Moral Development, Harper & Row Publishing House, 1981, 1984.
- [5] J., Rest, D., Narvaez, Moral development in the professions: Psychology and applied ethics, Lawrence Erlbaum Associates, 1994, pp.1-26.
- [6] T., Jones, Ethical decision making by individuals in organizations: An issue-contingent model, in "Academy of Management Review", 16/1991, pp.366-395.
- [7] J., Haidt, The emotional dog and its rational tail: A social intuitionist approach to moral judgment, in "Psychological Review", 108(4)/2001, pp.

814-834.

- [8] A., Mucchielli, Dicționar al metodelor calitative în științele umane și sociale, Polirom Publishing House, 2002, p.74.
- [9] U., Flick, An Introduction to Qualitative Research, the 4-th edition, Sage Publications, London, 2009, p.115.
- [10] E., Stănciulescu, Observația cantitativă și calitativă. Eșantionarea calitativă, pp.24-25, online: http://elisabetastanciulescu.ro/wp-content/uploads/2011/03/Observatia-cantitativa-si-calitativa_Esantionarea-calitativa_.pdf