



**“BABEŞ-BOLYAI” UNIVERSITY OF CLUJ-NAPOCA  
FACULTY OF PSYCHOLOGY AND EDUCATION SCIENCES**

**DOCTORAL DISSERTATION ABSTRACT**

**PREDICTION OF PERFORMANCE IN EXECUTIVE POSITIONS  
FROM THE PUBLIC ORDER AND SAFETY FIELD.  
METHODOLOGICAL ASPECTS**

**Doctoral Advisor:**  
University Professor Mircea MICLEA, Ph. D

**Doctoral Student:**  
Mihăiță-Bogdan STOIAN

**Cluj-Napoca  
2013**

# DOCTORAL DISSERTATION CONTENT

## List of tables

## List of charts

## Introduction

### **Chapter 1. Personological paradigm in studying leadership phenomenon: notable orientations with prognostic implications**

- 1.1. Neo-personological perspective (modeling)
- 1.2. Defective leadership phenomenon
  - 1.2.1. The dual nature of leadership: benefic or defective
  - 1.2.2. Personological etiology and prediction factors of managerial derailment
  - 1.2.3. Prevention and reduction of managerial derailment
    - 1.2.3.1. Executive staff selection
    - 1.2.3.2. Executive staff development
    - 1.2.3.3. Socio-professional integration of executive staff
- 1.3. Conclusions

### **Chapter 2. Predictors of performance in executive positions**

- 2.1. Cognitive capacities
  - 2.1.1. General cognitive aptitude
  - 2.1.2. Alternative conceptualizations of intelligence
    - 2.1.2.1. Emotional intelligence
    - 2.1.2.2. Practical intelligence
  - 2.1.3. Moderating factors of the relation between general cognitive aptitude and leadership
  - 2.1.4. Cognitive complexity
  - 2.1.5. Metacognitive aptitude
- 2.2. Personality factors
- 2.3. Intrinsic motivational factors
- 2.4. Experience in executive positions or roles
- 2.5. Conclusions

### **Chapter 3. Problematic issues related to measuring of personality for predictive purposes**

- 3.1. Bandwidth-fidelity dilemma
- 3.2. Linearity of personality-performance relationship
- 3.3. Effects of dissimulation on the validity of objective personality tests
- 3.4. Restriction of range of the measured variables
- 3.5. The importance and necessity to consider the applicant reactions to selection procedures
- 3.6. Typical versus maximum performance
- 3.7. Conclusions

### **Chapter 4. The modeling of professional competency**

- 4.1. Preliminary remarks
- 4.2. Competency modeling
  - 4.2.1. The origin and evolution of competency modeling: biographic reference points
  - 4.2.2. Defining elements of competency modeling

- 4.2.3. Conceptual framework of competency modeling
- 4.2.4. Methodology of competency modeling
- 4.2.5. Main modalities of collecting necessary data for competency modeling
- 4.2.6. The application area of competency modeling and benefits
- 4.2.7. Modeling professional competency in the public order and safety field
- 4.3. Conclusions

## **Chapter 5. Study 1: Managerial competency modeling from emic perspective**

- 5.1. Preliminaries
  - 5.1.1. Emic approach: premises and implications
  - 5.1.2. Implicit leadership theories
  - 5.1.3. Qualitative content analysis: generalities
- 5.2. Research purpose and objectives
- 5.3. Research methodology
  - 5.3.1. Participants
  - 5.3.2. Procedure
    - 5.3.2.1. Data collection and encoding preparative
    - 5.3.2.2. Encoding the previously condensed content
- 5.4. Conclusions on the content analysis

## **Chapter 6. Study 2: Operationalization and validation of managerial competency model**

- 6.1. Theoretical framework
  - 6.1.1. 360 degree evaluation
    - 6.1.1.1. Major topics of research in the field of 360 degree evaluation
    - 6.1.1.2. Complementarity between various rating perspectives in 360 degree feedback
  - 6.1.2. Aspects concerning the validation of competency models and the elaboration of 360 degree feedback instruments
    - 6.1.2.1. Content validity evidence
    - 6.1.2.2. Evidence based on relations to other variables
    - 6.1.2.3. Methodological aspects regarding the examination of the inter-rater agreement
- 6.2. Objectives and methodology used in conducting the study
  - 6.2.1. Research problem statement
  - 6.2.2. Research purpose and objectives
  - 6.2.3. Research questions and hypotheses
  - 6.2.4. Research methodology
    - 6.2.4.1. Operationalization of managerial competencies framework (elaboration of the Basic Managerial Competencies Evaluation Scale – BMCES)
    - 6.2.4.2. Pilot study regarding the preliminary check of the managerial competencies framework
    - 6.2.4.3. Pilot study regarding the importance and educability of the identified managerial competencies
    - 6.2.4.4. Validation of managerial competencies framework
- 6.3. Results
  - 6.3.1. Descriptive statistics
  - 6.3.2. Research hypothesis verification
    - 6.3.2.1. Hypothesis 1

- 6.3.2.2. Hypothesis 2
- 6.3.2.3. Hypothesis 3
- 6.3.2.4. Hypothesis 4
- 6.3.2.5. Hypothesis 5
- 6.3.2.6. Hypothesis 6
- 6.3.2.7. Hypothesis 7
- 6.3.2.8. Supplemental analysis of BMCES
- 6.4. Final considerations and conclusions
  - 6.4.1. Synthesis and interpretation of findings
    - 6.4.1.1. Psychometric properties of BMCES
    - 6.4.1.2. Validity evidence for the managerial competencies framework
  - 6.4.2. Research limitations
  - 6.4.3. Final considerations and practical implications

## **Chapter 7. Study 3: Typological approach of managerial competency**

- 7.1. Theoretical premises
  - 7.1.1. Preliminary considerations regarding the typological perspective of studying leadership behavior
  - 7.1.2. Reason for typological approach
  - 7.1.3. Typological methodology
- 7.2. Research objectives and methodology
  - 7.2.1. Study objectives and preliminary considerations
  - 7.2.2. Method
    - 7.2.2.1. Participants
    - 7.2.2.2. Measurement instruments
- 7.3. Results
  - 7.3.1. Identification of managerial types
    - 7.3.1.1. Inverted factor analysis
    - 7.3.1.2. Classification of research subjects into type categories
    - 7.3.1.3. Distinctive nature of managerial types
  - 7.3.2. Individualization of managerial types
  - 7.3.3. Managerial capability of the identified types
  - 7.3.4. Differences between rating perspectives
- 7.4. Final considerations and conclusions
  - 7.4.1. Managerial types
  - 7.4.2. Implications
    - 7.4.2.1. Adequacy of types to the situational context
    - 7.4.2.2. Implicit theories of performance
    - 7.4.2.3. Examination of gender differences
    - 7.4.2.4. Prediction of professional performances

## **Chapter 8. General conclusions and prefiguration**

### **List of bibliographical references**

### **Appendices**

- Appendix A: Dysfunctional behavioral tendencies that can be identified through the Hogan Development Survey (HDS)
- Appendix B: Basic Managerial Competencies Evaluation Scale (in excerpt)
- Appendix C: Managerial Capability Indicator

## KEY-WORDS:

prediction of professional performance, public order and safety, managerial derailment, competency modeling, competencies framework, emic approach, implicit leadership theories, qualitative content analysis, 360 degree feedback, competency models validation, inter-rater reliability, typological approach, managerial types, inverted factor analysis

People have been concerned with the theory and practice of leadership ever since the oldest times. Various practical manners and leadership techniques, and consequently theoretical reflections on the act of leadership have always been enforced in all social systems (Neculau, 1977). Efficient leadership is a challenge transcending organizations, regardless of their type: public or private, constabulary, military or civil (Baker, 2002).

The systematic development of the executive staff in order to ensure the continuity, opportunity and efficiency of the decisional process and of the managerial act within the system and its echelons represents a stringent necessity for the institutions with attributions in the public order and safety field (Glasscock, 2001). Increasing the operative capacity of the Ministry of Internal Affairs (MIA) structures in the field related to ensuring citizens' public order and safety, carrying on the process of institutional modernization and effectiveness together with implementing internal/managerial control standards for public entities (obligation that rests with the institution according to the *Order of public finances minister no. 946/2005 for the approval of the internal control Code, comprising internal control/management standards for public entities and development of managerial control systems*, with further modifications and additions) raise a series of challenges. At the same time, it opens up new opportunities for the executive staff from all hierarchical levels. The institution's capacity to attain its goals and vision and to fulfill the tasks stipulated in normative acts or in documents of public politics demand the constitution of a "managerial corps" able to respond in a qualified way to complex challenges induced both professionally and as a consequence of the civil society's requirements and expectations. Therefore, there is no doubt that managerial viability of public order and safety structures depends on the quality of the processes involving the selection and development of the executive staff career.

In this regard, psychology as science and profession is recommended as an important element in founding, projecting and applying an efficient management of human resources (especially concerning the attraction, maintenance and development of personnel) and occupational security (reducing risks of professional illness) within MIA. By means of psychology the premises of integral utilization at the highest parameters of the human factor are fulfilled. The implementation of this view implies turning to scientifically validated psychological practices and their integration in the general effort of identification, analysis and harmonization of needs and the potential executive staff with the interests and expectations of the institution.

Due to the analysis of the insufficiencies and constraints noticed when applying development strategies for MIA human resources, sectorial programs and plans in the field, a series of problems have been identified. These have not found a satisfying solution in the last years. For instance, when it comes to activities of recruitment, selection and career development, personnel does not run the gamut of mechanisms and instruments for a realistic planning of their own careers and the institution does not

perform a proper management of employees' professional career through chiefs/commanders and it does not grant a minimum of professional orientation and counseling through specialized structures. In addition, personnel evaluation is frequently accomplished superficially, most frequently by overestimating or by equalizing and leveling appreciations regarding professional performances and individual behavior of the targeted persons. Moreover, as far as initial and ongoing professional training is concerned, training programs addressed to the executive staff are not centered on competencies, on shaping managerial abilities and then developing them.

As a matter of fact, programmatic and strategic planning documents which are applied in the public order and safety field, issued on central level, stipulate the reform of human resources recruitment, selection and promotion as a priority, by enhancing the relevance, quality and transparency of the process, as well as a more precise prediction of professional performance when it comes to filling vacant jobs/positions and to the evolution in military/constabulary career. Among the action directions prefigured (by analysts in human resources management field) in order to attain this goal there are: (1) Actualization, based on rigorous studies and analyses, of requirements and criteria for filling positions and carrying out some categories/types of activities in MIA; (2) Projection and application of some instruments for professional selection (when entering the system and later on in one's own professional career when filling other positions) which should be able to ensure a reasonable rate of predicting candidates' success/failure regarding the fulfillment of the overall job requirements or in relation with certain professional activities; (3) Elaboration and implementation of a competencies framework for the occupations and specialties within the public order and safety field (which should underlie the processes of recruitment, selection, career planning, initial and ongoing training of human resources).

The conducted scientific intercession, described *in extenso* in the doctoral dissertation and as a summary further on, aims to contribute to the foundation and concretization of these desiderata. The doctoral thesis is structured in 8 chapters and it shows the conducted investigation for (1) the conceptual modeling of the managerial competency necessary for leading the operative structures for public order and safety on tactical and operational level, (2) transposition of the resulted model in shape of an multi-rater feedback instrument and its preliminary validation as well as (3) testing its applicability by determining the managerial typology encountered among the executive staff that operates on that management level.

The aims mentioned above have given the opportunity of three different successive studies (conceived in a "cascade assembly" so that the results of a study should constitute the premise for the next one) conducted on different samples.

After a vast bibliographical investigation, for the elaboration of the theoretical-methodological fabric of the scientific intercession described in the doctoral dissertation, two reference personological approaches for the study of leadership phenomenon have been reviewed. They possess prognostic implications in relation to the performance from the leader hypostasis (an integrative neo-personological model and the defective leadership perspective or the dysfunctional leadership behavior), the range of performance predictors in executive positions, problematic issues related to the personality measurement for predictive purposes and the conceptual framework of the competency modeling.

The conducted investigation was mainly explorative and it consisted in 3 studies in lineage, as it was previously mentioned.

The first study was intended to the managerial competency modeling from the emic perspective, more precisely to the probing and objectification in a synthetic manner (by means of a conceptual map) of the implicit theories regarding competencies implied by the exemplary leadership of organizational structures bureau and service type, held by apprised persons (who supposedly have a coherent and realistic image related to this aspect) through content analysis of the narrative data obtained due to exploratory interviews. The theoretical preamble of the study contains conceptual delimitations and methodological considerations regarding the emic approach as a study perspective, implicit theories on performing the act of leadership and the qualitative content analysis technique.

The achievement of the objective in this first phase implied the gradual and inductive extraction and systematization of the mentioned ideas and notions, via the methodological apparatus of the qualitative content analysis, and followed ultimately by the presentation of the category system (i.e., categories and concepts that emerge from recorded/written material being analyzed) resulted as a "concept map" which covers 12 super-ordinated managerial competencies (Receptivity, Communication, Intrapreneurship, Credibility, Development and motivation of subordinates, Knowing the organization/operative situation, Guidance and coordination, Stress/Conflicts management, Sociability and influencing, Organization commitment, Self-control and self-confidence, Decision making) and 32 subdivisions that summarily reflect the defining aspects of the explored conceptions. Given the assumed objective and the pursued methodology, the conducted intercession is enclosed in the phenomenological epistemology paradigm (which stress the role of subjective experience in getting to know a phenomenon) and those of the empirical grounded theory.

The resulted conceptual map offers an overview on the implicit theories theses and on the main ideas of objectified conceptions (developed in the statements of 45 resource-persons) regarding necessary managerial competencies of a capable bureau/service head, able to provide the perspective of an efficient leadership.

Although an empirical grounded conceptualization typical for the field or the socio-cultural context of public order and safety was intended, some analogies with the model of the 10 crucial managerial competencies for the head of the American police units, indicated (in the theoretical preamble) as one of the notable precedent from this occupational area, are obvious. Thus, when considering "correspondences", it seems that tasks regarding credibility, communication, guidance and coordination, development and motivation of subordinates, as well as sociability and influencing/negotiation transcend cultural borders. On the other hand, by analyzing differences for instance, in local environment, prospective thinking is not cherished, which can speculatively be attributed to the institutional ethos or even to the Romanian national one (in the sense that, unlike Americans, Romanians present a deficit of prospective attitude individually and socially speaking). While among American police officers the stress is laid on cultivating a prospective vision of anticipating risks and opportunities, among their Romanian correspondents one would say that the reactive approach, rather problematizing, prevails.

The second study aimed to test the capacity of the managerial competencies framework compiled in the previous phase to underlie the formulation of predictions regarding individual professional performances of the leaders of public order and safety operative structures organized as bureau and service.

Theoretical-explicative preliminaries of the study were consecrated to the procedure of evaluating professional performances and individual behavior by using multiple sources (integration of multiple perspectives offered by subordinates,

correspondents and superiors of the person under evaluation). To this end, a series of significant theoretical and methodological aspects have been displayed regarding reliability, validity and potential systematic errors related to evaluation, differentiation of the rating perspectives such as generalities concerning the validation of competency models and the elaboration of multi-source feedback instruments (for instance, general notions referring to content and criterion validity, as well as methodological considerations concerning the examination of rating consistency and inter-rater reliability).

Prognostic valences of the accomplished competency model have been examined by transposing it in an instrument destined to the evaluation through the resort to multiple sources, also known as multi-rater or 360 degree feedback (Basic Managerial Competencies Evaluation Scale – BMCES) followed by the analysis of the direct relation between the revealed competencies level and an independent operationalization of professional potential of the research participants. BMCES was conceived in order to collect and integrate evaluative type information from multiple sources (different rating perspectives; e.g., supervisors, peers and subordinate raters), quantifying perceptions on the overall managerial competency (through a composite score), as well as on the 12 underlying competencies (by calculating specific scores) unraveled after the modeling of this construct. The problem regarding the validation of the managerial competencies framework was operationally defined by means of 7 hypotheses related to the questions of the research, which were subdued to verification through specific means of the statistical inference.

The precision of BMCES in the measurement of managerial competencies has been verified by determining the intra and inter-rater reliability. The overall instrument, as well as each of its scales, has presented a corresponding reliability, which constitutes a favorable premise for their validity. Scales that operationalize the 12 managerial competencies indicate a high internal consistency in all the categories of raters, except for self-report. However, the global inter-rater reliability (i.e. internal consistency determined based on all answers, regardless of the provenience source) for each subscale exceeds the values set as reference points (i.e.,  $\alpha$  coefficients higher than .70 for the instruments in the early stages of development). Inter-rater reliability has proven to be higher when the statistical indicators used were not based on the idea of association between two variables (i.e., less susceptible to range restriction than correlation measures). As such, they could have been affected by the phenomenon of range restriction (according to expectations, values of Pearson and intra-class [ICC] coefficients were significantly lower than the non-correlation  $r^*_{wg(j)}$  statistic). Results referring to the degree of consensus between the categories of raters were also differentiated based on procedures and models of the used statistical analysis. Thus, a lower consensus was predicted between the categories of evaluators in comparison with the one from inside, under the circumstances of the resort to statistical techniques based on the degree of covariance between two variables. Except for the boss-peer dyad, the obtained data have supported this presupposition. A possible cause is the phenomenon regarding the systematic distortion of answers as an effect of a leniency bias, manifested through preponderant use of the higher range of the scale. This range restriction was pronounced enough so that it could reflect on the operational statistical indicators by attenuating the within-group rating similarity.

At the same time, conclusive arguments supporting content validity of managerial competency model were obtained. The resort to the procedure of “retroversion” has provided a guarantee for the presence within the final model of the behavioral indicators which ensure the most adequate exemplifying of competencies.



A major objective consisted in the examination of data used for the demonstration of criterion validity, especially since the journey through specialized literature has revealed the existence of a small number of studies that aimed to verify the capacity of the managerial competency models to facilitate or enable prediction of professional success in executive positions from the public order and safety field. Proofs related to the prognostic value of the conceptual model in predicting managerial capability are somewhat ambiguous. Even though positive correlations have been found between competencies level from the composition of the model and the synthetic indicator of managerial capability, only half of them were statistically significant (Receptivity, Communication, Knowing the organization/operative situation, Stress/Conflicts management, Organizational commitment and Decision making competencies). Therefore, even though the 12 competencies are extremely important and necessary for performing the aimed executive positions, it seems that in the research sample only 6 of them facilitate the discovery of chiefs susceptible to outstanding managerial qualities (i.e., would be more predictive of performance).

The examination of the relation between results presented in an integral form for each kind of rater and the synthetic indicator of managerial capability has offered partially concordant data with the presumed and insufficiently probative relations that do not fully support validity related to criterion.

Ultimately, in the absence of a factually confirmed conceptualization on managerial competency, specific to the tactical and operational leadership sample from the public order and safety field, the exploration of the underlying structure of this construct has been accomplished by means of stepwise regression procedure and an additional factor analysis. The outlined factor structure differs from the initial configuration of the managerial competencies framework. Many previous researches on the same topic have identified competencies based on opportunities and importance attributed by experts, neglecting further investigation regarding their actual relation with professional performance by means of statistical inference.

In comparison with reliability and validity indicators of other analogue instruments mentioned in specialized literature, the psychometric characteristics of BMCES are relatively close. However, further researches focusing on a more thorough investigation of the technical parameters necessary in order to take into account behavior during exploitation and, as appropriate, the enhancement of the instrument, are welcome. For instance, an immediate request of the more accurate determination of BMCES is constituted by the re-administration after a reasonable time range in order to apply the test-retest method to know the stability involved in the measurement of managerial competencies. In addition, the internal consistency values used for self-evaluation purposes bear improvement.

On the other hand, by using even bigger and more representative samples one can deepen knowledge regarding within- and between-rater group reliability, as well as exploration of the factor structure of managerial competency model. In the context of increasing interest and receptivity on behalf of executive positions holders for the 360 degree feedback, crossed validation of the advanced managerial competencies framework is necessary in order to assess its generalizability to other hierarchic or managerial echelons.

The predictive value of the conceptual model, namely its capacity to afford prognoses on persons under scrutiny needs additional empirical support, especially because some doubts are grounded according to the observations and conclusions of this study. Construct validity must be subdued to a reexamination that should imply collection of new data, from bigger and more diverse samples in order to draw general

theoretical conclusions. To assess discriminant validity, it would be helpful to compare this model specific to the executive positions from public order and safety field with other generic leadership competency models.

Most significant drawback derived from the inconsistency of the used criterion for the validation of the managerial competencies framework. More precisely, managerial capability has been objectified through an evaluation scale composed of only 13 items, although some methodological prescriptions available in specialized literature have been followed (i.e., supposedly positive practices have been replicated). This shortcoming makes necessary the deepening of the criterion validation having as a reference a composite ensemble of indicators of leadership aptitude (which should include objective and subjective competency or performance measures).

However, statistical results of BMCES validation have justified (giving the opportunity for the third study) the use of the multi-rater feedback instrument previously developed to investigate the profile similarity of managers across the 12 managerial competency dimensions, in order to identify profiles of prototypical managerial competency (in other words, for the discovery of police leaders' typology based on their managerial competencies) on tactical and operational level in the public order and safety field, by the instrumentality of inverse principal components analysis.

For the theoretical grounding of the study, there were brought arguments selected from specialized literature regarding the typological perspective of studying leadership performance (including the reason for this type of approach) and the methodology of developing taxonomies of competency profiles or identifying managerial types.

In the investigated sample three managerial types were "isolated" and the research subjects' typological classification (participants were classified into type categories according to their patterns of component loadings) has revealed the following allotment: 46.4% - Type 1, 37.1% - Type 2 and 16.5% - Type 3. The nature of managerial types was determined by examining the correlations between participants' component loadings and their standing on the BMCES dimensions (i.e., scales). A positive correlation indicated that more prototypical exemplars of that type category tend to score higher on the dimension in question. Types were further defined (in order to individualize the revealed managerial types) by calculating correlations between component loadings and scores on the other available individual-difference variables (mental ability scores and personality instruments' scales). It was considered that defining a derived type based on managerial competencies configuration would have more meaning if the dimensions standing is related to the pattern of strengths and weaknesses across personality and mental ability scores obtained by those exemplifying it. The distinctive character of managerial types received statistical support. According to the highlighted particularities, those taxonomical categories were surnamed Distant Technicians (Type 1), Amiable Commons (Type 2) and Affable Influents (Type 3).

Answers belonging to each of the 3 categories of raters (i.e. hierarchic chiefs, peers and subordinates of the evaluated executive staff) were also subject of the inverse factor analysis in order to verify the extent to which the same managerial types can be highlighted. Although there are clear differences between the rating perspectives in terms of the magnitude and direction of correlations between component loadings and BMCES dimension scores, general patterns were somewhat similar, especially for competencies on witch the types differ the most (that help individualizing managerial types). Hence, the identified types were proven to be relatively general and shared by all rater groups.

This investigation into managerial typology presents a series of practical and theoretical implications (a description of them being offered in sufficient detail) pertaining to the relative effectiveness of each type in different situations (matching types to situations), implicit theories of performance (e.g., work addressing rater cognitive processes), gender differences and last but not least, to the prediction of professional performances (e.g., selection of managers).

Finally, the main contributions resulted from the investigation that represents the object of the present doctoral dissertation consist of (1) the theoretical systematization of knowledge related to the prediction of performance in executive positions topic, with particularizations regarding public order and safety field, (2) the assembling and implementation of a complex methodological apparatus, with heuristic valences, that combines quantitative and qualitative methods meant to offer accuracy to the processes of managerial competency modeling, of operationalization and validation of the resulted competencies system, as well as to the identification of managerial typology based on it (3) grounding and establishing the set of key managerial competencies necessary to all heads (i.e., knowledge, aptitudes, skills and attitudes that a leader must possess and adopt) of operative structures of public order and safety on tactical and operational level (or generally speaking, mentioning the things that the chiefs of structures in question should know and be able to accomplish in order to be susceptible to high performances), (4) elaboration and validation of 360 degree feedback instrument (namely BMCES) meant for the evaluation by means of multiple sources of the executive staff that operates on the level mentioned above and last but not least (5) highlighting and individualizing the existing managerial typology (i.e., major profiles of prototypical managerial competency) on this echelon.

The investigative-scientific agenda opened under such circumstances aims to continue efforts of optimizing and validating BMCES. Targeted applications will cover the area of selection and development of executive staff career in public order and safety field.

#### SELECTIVE BIBLIOGRAPHY

- Baker, T.E. (2002). *Effective police leadership: Moving beyond management*. Flushing, NY: Looseleaf Law Publications.
- Glasscock, B.D. (2001). President's message: IACP's leadership development initiative. *The Police Chief*, 68, 6.
- Neculau, A. (1977). *Leaders in groups dynamic*. Bucharest: Scientific Publishing House.