

**“ALEXANDRU IOAN CUZA” UNIVERSITY OF IASI
FACULTY OF PSYCHOLOGY AND EDUCATIONAL SCIENCES**

DOCTORAL THESIS

**Personality structures in the first youth
- with special reference to students -**

SUMMARY

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2012**

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The investigation of personality has always been a crucial domain in the frame of psychological researches. Any personality theory has the role of representing, in a conceptual manner, the relationships between the specific aspects of the domain, being in a last resort an explanatory model for the reality aspect which is called personality.

The thesis has a convergent structure, being organized in four chapters, first three of them are theoretical and the last one, practical. Within the theoretical chapters, we tried to identify the affiliation of ideas and the relevant elements for some of those theoretical approaches which ensured and facilitated the conceptual context, the taxonomy and methodology promoted in the contemporary psychological literature by one of the dominant paradigms in the personality researches – The Five Factor Model.

For the beginning, in the first chapter we aimed to make a clarification of the personality concept, based on the common fundamental aspects used within the various approaches of personality psychology. The aspects which were used for the arguments sources to sustain the various theories represented a preamble necessary to classify the personality theories according to pertinent criteria. In the second sequence of the first chapter, a series of representative personality theories were treated on the confluence line through the most recent form of the trait theory (*the model of the stable dispositions*): the psychoanalytical Freudian theory, the personality construct theory and the trait theories (the ones issued by the authors who assumed the lexical hypothesis: G. Allport, R.B. Cattell, L.R. Goldberg, P.T. Costa and R.R. McCrae). Within this approach, we pursued to explain the conceptual specific and the explanatory core of the concepts which enabled us to evaluate the scientific degree for each of the theoretical models presented. The relevant criteria used are: comprehensiveness, internal consistency, economy degree, verifiability and theoretical and practical prolificacy.

The second chapter was dedicated to the investigation of the motivation concept. Within this framework, we investigated the core aspects related to the specific of motivation and to the main types of reasons. Assuming the distinction between the primary motives (biological) and the secondary ones (psychological), in this chapter was emphasized the second category, focusing on those theoretical models which consider the psychological needs as being the main engine to determine the human behaviour: the ideal types theory (E. Spranger), the hierarchical model of the needs (A. Maslow), the need for self-accomplishment theory (H. Murray) and the model of the existence themes (H. Thomae).

The third chapter was dedicated to the psychological projection mechanism and to the specificity of the projective techniques in knowing the personality aspects. Starting from the Freudian meaning of the projection mechanism, in the first part of the chapter, we pursued the evolution of the meaning of this term, up to the modern contemporary refining (initiated by L. Frank) which is the most functional and enabled the substantial development of a variety of projective techniques. Based on these clarifications, the chapter pursues the problematic of the types (forms) of projection, especially by valuing the terminological distinctions accomplished by R. B. Cattell. The chapter continues with the analysis of the specificity of the projective tests, considered as sources of the assessment of the personality. These clarifications allowed us the presentation of both some taxonomies and the synthesis of the aspects that sustain their value as psychological instruments.

The fourth chapter include the three empirical studies as the practical part of this thesis. In the first part of each study were presented the instruments, the functioning of the variables into measurable factors and all the procedures used within the research. The first practical study focused to identify the structural personality patterns of early year students (including the five personality factors promoted by the Five Factor Model, each with its own valence) aiming to determinate the most typical structures. Starting from these configurations, considering the degree of similarity, we pursued to realize a differentiation taking into account the number and the types of the motivational - value components. In the other two studies, we intended to emphasize the personality, motivational - value and intellective factors, which can explain the academic performance of the students, as a relevant dimension associated with the student life. The second study, a quasi-experimental one, showed the impact of the three motivational structures (determined by the motivation test) over the academic performance. The third study enabled us to accomplish two significant models predictive for the academic performance, assuming as predictors the consciousness and the general intelligence level (as a measure of the educability degree).

Chapter I – Theories of personality in the contemporary psychology

In the first part of this chapter, we made a theoretical preliminary classification related to the specificity of the definition of the term personality (starting with the basic meaning in common sense and finalising

with its theoretical and referential meaning) and the problematic of the personality theories taxonomy. The common dimensions of the majority of definitions analysed in concordance with the clarifications of R. Perron (1985) are the globality, the coherence and the temporal stability of the personality. Therefore, keeping the specifications of G. Allport, R.B. Cattell and L.A. Pervin, we assumed the following working definition of personality: “personality is an organised and flexible ensemble of internal characteristics, with a high rate of temporal stability, ensuring trans-situational consequence of the behavioural patterns specific for a certain individual”. Later in the pursuit, we proposed two complementary ways of classification for the personality theories, the first of them on the criterion of the assumed epistemic paradigm and the other one in accordance with two simultaneous criteria: the principal type of approach and the sources of the factual support.

In the second part of the chapter, we pursued two basic directions: on one hand, the systematic presentation of the contents of the most representative theories of personality and on the other hand, establishing the impact of these theories in the contemporary research in personality psychology. Therefore, the presentation of certain personality theories was not a purpose itself but an imperative starting point to establish the level of knowledge accumulated so far in this domain. On a second plan, we focused to identify the origins, the evolution and the current coagulation of the trait concept within the personality theories.

Concerning the two theoretical models which are not enrolled directly under the trait paradigm, the Freudian psychoanalytical theory and the personal construct theory, we pursued to clarify the theoretical frame and the dynamic dimension in the development of personality, focusing on the aspects directly related to the factors which contribute to the outline of a certain personality structure.

In the presentation of the Freudian psychoanalysis, we considered the relationship between the two topics, emphasizing the structural model of personality with the main aspects on the self defence mechanisms, the psychosexual development stages and the fixation phenomenon. These considerations outlined the context of the presentation of the four types of personality thematized in psychoanalysis (oral, anal, phallic and genital/mature types). Regarding the scientific value of the Freudian psychoanalysis, there was underlined that the weak points consist in low levels of empirical validation and low levels of internal consistency while the strengths concern the high level of comprehensiveness and theoretical-applicative prolificacy.

The G. A. Kelly model facilitated the emphasis on the term of personal construct, a concept competing with the one of personality trait. The specific of the personal constructs and their types were distinguished in the context of the presentation of the fundamental postulate which is the base of this theory and of the eleven corollaries that explain the personality organization dynamic principles (by the permanent construct testing, depending of the subjective anticipations on future events). The constructs system (hierarchically structured) is pervious and by the process named constructive alternativism is ensured the vector of the personal development - which results from a continuous, mutual, active and dynamic influence between the individual and its environment. This actions lead to a process of remodelling the constructs system in accordance with the new life experiences. Therefore, in Kelly's approach, a person is psychologically mature if it has a flexible perspective of the world (based on a pervious constructs system, hierarchic, valid and accurate) and is able to impose its control on his own behaviour in a wide variety of situations. The evaluation of the scientific value of G.A. Kelly's theory showed that his strengths are reflected by the high level of internal consistency and economy degree while the weaknesses are indicated by the low comprehensiveness, by the weak empirical validation and by the diminished impact of influencing theoretical-applicative approached in the personality domain.

The first of the models based on the personality trait concept is the one elaborated by G. Allport, the 'father' of the trait theory. Even if (as in the case of other theoreticians presented above) Allport is still outlined within the idiographic approach, his contribution of conceptual and methodological conception allowed a major change in the focus point of the personality theories, namely it lead to the prevalence of the nomothetic approach, dominant in the field nowadays.

G. Allport places the personality in the junction point between the influence of the hereditary and environmental factors, considering that the aspects inherited (as the physical appearance, intelligence, temperament) are modelled and polished by the permanent interaction of the individual with his belonging environment. The way Allport presented the definitory notes in the trait concept was kept as a stable core of this concept intention, in all the modern trait theories. Defined as a 'neuropsychic structure which has the capacity of making several stimulus equivalent functional and the capacity to initiate and orientate equivalent forms (permanent as signification) of adaptive and expressive behaviour', the personality trait is characterised by the fact that is not directly observable (but only by the person's reactions), is

temporally stable, is dynamogenic (orientates and determines the person's actions) and by its activation we obtain consistent responses with similar situations – thus, having a trans-situational character. Emphasizing the motivational aspect of the personality development, Allport considered the functional autonomy (by means of which the motives which previously had an instrumental extrinsic role get an inner activating force, at an intrinsic level) make up the mechanism and the vector which ensures the person's evolution towards the psychological maturity. Therefore, if at birth the child is merely entirely determined in his actions by the hereditary factors, while growing and interacting with the environment, it moulds itself by learning and becomes freer and freer of the hereditary legacy. The characteristics of the mature personality, regardless of the dominant value motive for a specific type of personality, are the result of refinement, crystallization and rank of the personality traits by the process of functional autonomy. The mature person shows clearly a sort of personality unity being at the same time perfectly capable to perceive in a right (objective) way the world but is also able to perceive the one belonging to itself. Some aspects as the interest not only for its own welfare but also the care for the others, the capacity of affective implication in the relations with similar fellows, the feeling of emotional stability (achieved by the generalisation of the self control), the realistic, objective perception of various situations and awareness of its own qualities or deficiencies (self consciousness) and the presence of some personal standards which must guide the individual's behaviour in the way of accomplishing the selected purposes (which reflects the achieving level of the person) are some indicators mentioned by Allport in the process of establishing one's personality maturity level.

Following this chapter, we emphasized on the specificity of the theories (within the trait paradigm) which respecting the tradition initiated by Allport, assumed the lexical hypothesis: R.B. Cattell, L.R. Goldberg, P.T. Costa and R.R. McCrae.

In the presentation made for the theory proposed by Raymond B. Cattell, we showed his concern to build a complete system of classification of the personality traits. The author notices three criteria in according with the classification proposed: the nature of the traits (constitutional and achieved traits), the depth level (source-traits and surface-traits) and the specificity of action (temperamental traits, dynamical traits and abilities). Based on three modalities to collect data (L-data, Q-data and T-data) and after the factorial analysis (oblique) Cattell outlines the 16 personality factors (measured with the well known instrument 16 PF) – considered as source-traits of

personality. The motivational aspect of personality is clarified in the context of the presentation of the specific of dynamic traits (named by Cattell ergs) and represent, in the economy of this thesis, a foreshadowing of some theoretical considerations in the next chapter.

The model of L.R. Goldberg and the one proposed by Costa and McCrae go into the category of penta-factorial models. The distinction between the genotypical and fenotypical traits (clarified in Cattellian tradition) is very important for the specificity of the two models. Considering all the existent differences, both models have in common the mentioning of the five major factors of personality: Extroversion, Neuroticism, Openness, Agreeability and Consciousness. The main objective of Goldberg is related to the fact that the linguistic analysis (upon which lists of pair bipolar adjectives are composed) can reveal the fenotypical patterns (traits 1) which consequently are to be explained, they will generate possible hypothesis in the study of the generative mechanism (traits 2). Nevertheless, we must notice that the penta-factorial models tend to ignore the determination itself of these generative mechanisms, remaining mainly to a taxonomical overview on personality traits. Neither Goldberg, nor Costa & McCrae focused their explanations on the dynamics of personality development and on the way of engendering the traits, even if in some studies the authors consider the malleability of certain personality factors. A tactful manner of the Five Factor Model promoters in avoiding these explanations (ultimately referring to the prevalence of nature or nurture on outlining the personality) is the choice to talk about the domains of personality (the five major factors) and about the associated subordinate facets. With this terminology, we place ourselves in a sort of personality ‘topography’, mapping everything that is observable in the personality ‘landscape’ but without insisting on its genesis. Comparing with the pragmatic interests of personality knowledge, such an approach allows us to describe the way a person can be, to compare people between them and to estimate their performances according to various criteria, even if we ignore the vectors that moulded their particular personality structure.

The scientific value of these models is high. Regarding *the comprehensiveness*, both Cattell theory and the two penta-factorial models show a high level of completeness. In their internal consistency (as a taxonomy type) are included in a systematic and completing manner, aspects revealed by the majority of the previous authors but also new ones, ignored by some of them – the abilities, emotions and motivation. The range of behaviours envisaged by these models is very wide, including both

behavioural aspects of normal people and also of the pathological field. The organization of concepts reveals a high level of coherence, each of the terms having a distinctive function within the system, which ensures a very powerful *internal consistency* of these models. Moreover, we can mention the worth of Costa and McCrae to underline the idea that the organisation of traits in the personality system is a hierarchical one, recovering (on empirical undeniable proves) the cattellian assumptions. The above mentioned models have the benefit of being *economical* regarding the volume of concepts used, without being simplistic. The theoretical and methodological explanations generated by the use of factorial analysis were an important means to subsume the various personality characteristics to a significantly reduced number of factors (domains of personality) with a good capacity to ensure both complex descriptions of individuals and surprising similarities/differences between them. Another strength of the penta-factorial models is the *empirical validation*, based on high level of operationability related to traits concepts. Both the exploitation of the lexical hypothesis and the longitudinal and transversal studies (into different populations regarding age, sex, race, and linguistic group) outlined the five stable factors, reflecting constant behaviours. *The theoretical and practical prolificacy* is showed both on personality evaluation instruments and on the huge volume of researches performed under this taxonomical paradigm. Not ignoring the limit generated by the weak interest on explaining the way that personality traits form themselves, we must though admit the powerful impact of the model in various domains of interest: psychological, sociological, economical, educational, military and even anthropological. Probably, the final contribution of this model is represented by the opportunity of opened shared communication between researchers belonging to different theoretical beliefs from different areas of specialization, by ensuring a common vocabulary and a methodology proving a high level of objectivity.

Chapter II – Aspects of motivational structure

In chapter II, we tried to analyze the motivational aspects of personality, a theme which allows us to surprise some bench-marks for the expression of some plausible hypothesis regarding the mechanisms which could generate the crystallizing and the activation of what we framed in the previous chapter in the content of the personality trait concept.

Within this chapter, we emphasized the defining aspects of the motivation concept, presented in the areas of the theoreticians'

investigations: the motives (as structural elements of motivation), orientation, intensity and persistence. Thus, the motivation comprises of the totality of motives (a complex structure, over ranked to them) and has the role of orientation, initiation and regulation of the actions towards a purpose (more or less precise). The analysis of the motivational forms pointed the distinction between the biological motivation (as an assembly of primary needs) and the psychological motivation (as an assembly of secondary needs, having a functional role) and between the extrinsic motivation (generated by the external aspects of the action made by the individual) and the intrinsic motivation (where the motives of action don't depend on an outer circumstance of activity, the presence of the satisfaction being generated by the accomplishment of that action by itself).

In the intention of the term 'motive' we can find common defining notes with the personality trait concept: the presence of some psychophysiological basis, the idea of temporal stability and the their capacity to predispose the individual towards the selection of a specific type of reaction in a particular situation. Within the presented taxonomies, we aimed to identify the specificity of motives and especially the specificity of the motivational structures – designed as more complex configurations by which the motives associate between them. Historically speaking, the typology of E. Spranger (even if reduced by its monodimensionality) allowed the focus of interest on identifying the motivational structures in the context of personality psychology (an idea clarified by Cattell by proposing the term of dynamic traits of personality). A. Maslow emphasizes the organised (hierarchical) needs and sets clear bounds for the specificity of every level of the motivational structure. The motives which are placed on the D needs level (esteem, friendship and love, security, and physical needs) are considered by Maslow as being more imperative (they are based on a higher level of urgency for their accomplishment) than the self-actualization need. This is a mediating vector to a more refined level, the one of self-transcendence needs (B-values), oriented towards the general purpose of 'the personal growth'. The persons' characteristics having a high level of fulfilment of the self accomplishment need are at the same time indicators of the maturity and they are corresponding in content with the previous ones, assumed by S. Freud, G. Allport and R.B. Cattell (realism and action efficiency, self acceptance and tolerance for the others, depth of interpersonal relationships, focus on problem-solving, respect and autonomy for the social accepted norms).

H.A. Murray and D. A. McClelland streamline the model in theory promoted by A. Maslow, and emphasize the importance of secondary needs (the category refers to those types of needs which are acquired during the psychological development of the individual and which lost to the greatest extent the direct link with the biological processes) explaining the causes of the behaviour of individuals. This moderate interactionism offers sustainable hypothesis on the mechanism for the generating and crystallizing of this high level of motivational structure.

H. Thomaе is concerned about the unique character of the human beings (assuming the idiographic approach, the same as the other authors included in this context). The axis of personality analysis proposed for the investigation include the following categories: *formal categories*, *cognitive categories* (content), and *thematics of existence* (the directions of behaviour) and *techniques of existence* (ways of reaction by which the person responds to the environment's requests). From all these categories, the motivational-value aspects are integrated within the themes of existence category. The thematic structure represents for Thomaе the hierarchy that the motives can have in a certain person, and the way of being of an individual is distinguished by the hierarchy of motives, by the unitary structure of meanings and by the particular way of a person to see the world, the society and things in general.

The model proposed by Thomaе is accompanied by an idiographic methodology to identify these personality categories which was the basis for A. Cosmovici to elaborate a projective test in order to outline the motivational structures – The Real Motives Test. We also mention that the arguments of the other authors are pointing to the recommendation of the projective tests as means of assessment for the motivational dimension of personality.

Chapter III – Knowing personality through personality projective techniques

Assuming the distinction between the idiographic and nomothetic approach, in this chapter are presented the relevant aspects related to the projection phenomenon (as a psychological mechanism that represents a rich source of personality investigation) and to the specificity and value of the projective techniques. The enrichment and refinement of the Freudian meaning for the projection concept (mechanism of Ego defence consisting in expelling of a person and the attribution towards the other – human or thing –

of the qualities, desires, feelings which are refused or ignored by the subject) generated the possibility of more pertinent operationalizations, which are already at the basis of the projective tests. The contemporary meaning emphasizes the idea of correspondence between the internal structure and its representation in the exterior (in the individual's reactions) and is based on the phenomenon that makes the subject to perceive and respond to the environment according to its own internal structure. Thus, the projection is, from the point of view of L. Franck, the human's tendency to be influenced by the needs, emotions and their own psychological structure in interpreting the reality, any time the perceptive field is ambiguous.

The forms, through which the projective phenomenon manifests, were systematised by R.B. Cattell, who specifies the possible mechanisms by which a person reaches to grant certain significance to an ambiguous situation: the perceptive naive distortion, misperception by autism, misperception of the need of coherence and misperception by defence mechanisms of the Ego. These forms of perceptive distortion are the base of the projective tests which Cattell include in the category of the dinaperceptive defensive tests. In the case of the projective techniques, every assumption made by a subject on the real world (due to its own perception) is a sequence of chained arguments for every level in which the personality traits are included as "hidden premises". This happens even if the subject is entirely realist and logical; but if, as an extra, the subject will adopt defence mechanisms, the rationalisations will interfere and will action on the inductive or deductive conclusions, either by the cross out of the conscience regarding the fact or by the various well known logical errors. The simultaneous examination of the subject's beliefs and axis of reasoning will enlighten the fundamental personality (the hidden premises) and the defensive structures.

As specific techniques, the projective tests have at least two aspects which they customize: the subject's task and the stimulus material have a high degree of ambiguity (are weakly-structured) and the subject does not know the significance of the answers he gives (and is very difficult for him to realize what aspects are being evaluated). The complexity and the diversity of the projective tests generated some divergences concerning their classification but one of the most used classifications is the one proposed by G. Lindzey (using as criteria the task given to the subject) who distinguishes between: associative techniques, constructive techniques, completing techniques, choosing techniques (ordering), expressive techniques. Regarding the scientific value of the projective techniques, the dedicated literature

surprises a convergence on assessing their limits: low level of precision/fidelity, reduced level of validity, high requirements of time and a greater effort to learn how to use them (so a longer and more intensive specialisation), an arbitrary methodology of sampling. All of these limits are mainly derived from the theoretical paradigms which fundament these tests but also from the specificity of the projection. Still, a range of arguments sustain the process of knowing the personality by projective test of which we can mention: their capacity to reveal deeper aspects (even of unconscious nature) of personality, the difficulty of the subject to cheat on them, they can be applied on subjects with lower cognitive skills or culturally deprived and some of them are even economical (they consume less time while applying and scoring, offering relevant information about the subject's frustrations or affective problems). Thus, the projective techniques can be considered a unique source for affective-motivational information, they can reach deeper levels of personality and, in their own theoretical context, they are solid starting points in the psychological intervention.

Chapter IV – Empirical studies on personality structures of students

The three empirical studies which are the practical part of this thesis aimed: to identify typical structural patterns of personality in the population of students and the motivational-value differences which appear between them but also the outlining of the personality factors, motivational-value and intellective which can explain the academic performance of the students (considered as a relevant dimension associated with the specificity of students' life). We will present further the results of these studies and the conclusions of the research.

The first study (A typology of the personality structures) was approached in the theoretical-methodological context offered by the penta-factorial models concerning the personality. As the research is focused on the analysis of the personality structures at the age of young adults, we used as groups of subjects, students in the first and second year of studies from five faculties within the “Al. I. Cuza” University of Iasi. The application of the instruments was made during two years, since 2005, on a group of 732 college students within “Al. I. Cuza” University of Iasi. To measure the five personality factors, we used the *IPFP (Penta-factorial Personality Inventory)*, an instrument elaborated on the Five Factor Model basis

(Costa&McCrae, 1992) which measures similar constructs with the NEO-PI-R Test. To measure the motivational-value components, we used the Real Motives Test (but introducing a different form of scoring than the one proposed by the author, to improve the psychometric characteristics of the test).

Starting from the scores obtained on each of the five domains of personality (Extraversion, Neuroticism, Openness, Agreeability and Conscientiousness), the subjects were framed for each of the five factors, being evaluated either as low intensity of the factors or high intensity of the factors. We named as *personality pattern* any combination (aggregation) from the 32 possible combinations, each of them being described by a logical conjunctive raw, such as $e_1 \& n_1 \& o_1 \& a_1 \& c_1$ (the letters show the factor and the coefficient i – which can take only the values 1 or 2 – indicate the intensity sector where the subject is framed to that factor).

Based on this operationalization we verified (and confirmed) the following research hypothesis:

Hypothesis 1: The personality structural patterns are to be found with a different frequency for the analysed population

Hypothesis 2: The personality structural patterns are different concerning the typicality level.

Hypothesis 3: There will be differences of intensity for several motivational-value components in the case of students with a low level of similarity for the typical personality structural patterns, comparing with the students who have a higher level of similarity for the typical personality structural patterns.

The results of this study showed that every of the 32 patterns established on theoretical criteria is to be found for sure inside the population investigated (meaning that in every of these categories are included concrete individuals whose personality can be described according to the personal matrix that corresponds to its own personality structure) and their occurrent frequency is different. Moreover, it is outlined the fact that certain structural patterns have an observed proportion (P_{obs}) of appearance, significantly different from the expected proportion of appearance. From all the patterns, the 6 ones with a significant higher rate than expected (according to the probability theory) have been considered typical structural patterns. The six structures have been suggestively named and characterised according to the particular configuration of the conjunctive descriptive raw: **the conquerors** - $e2n1o2a2c2$ (ps_24), **the mercenaries** - $e2n1o2a1c2$ (ps_22), **the drones** - $e1n2o1a2c1$ (ps_11), **the deserters** - $e1n2o1a1c1$ (ps_9), **the provocateurs** -

e2n2o2a1c1 (ps_29) **and the little robots** - *e1n1o1a2c2* (ps_4). The number of differences identified on the motivational coordinates, which are an outlined function with the existent similarity parameter between typical patterns, confirmed the third hypothesis of the research: on a high level of similarity for the structural personality patterns (identified based on traits) the motivational-value differences are not so many.

The second study (The role of the motivational factors in academic performance for students in early years of study).

Starting with the theoretical context shaped into the second chapter, in the first part we presented in details the Self Determination Theory, promoted by Deci & Ryan (1985), focusing on the differences between the extrinsic and intrinsic motivation. The fundamental distinction appears between the intrinsic motivation – which refers to doing something because that action is by itself an interesting one and it generates pleasure – and the extrinsic motivation, which refers to doing something because that action leads separately to other regarded results. The authors consider that intrinsic motivation is generated in the main part by stable needs such as the need of competence and autonomy of the Ego. The two authors identify four major components, belonging to the extrinsic motivation, hierarchically distributed: *external adjustment* (whose specificity is the salience of rewards/benefits or punishments/unpleasant consequences of doing/not doing certain actions), *adjustment by introjection* (which is based on the implication of ego and is focused on the need for self confirmation or valorisation by the others), *adjustment by identification* (where the valorisation of a certain activity is consciously guaranteed by an over ranked category of interests) and the interactive adjustment (the most autonomous level of extrinsic motivation, which is based on the existence of a personal hierarchy of purposes known by the individuals and assimilation of the actions which are congruent and relevant to them). On the motivational continuum, from the amotivation stage (the most impersonal level of participation to an activity) to the one of integrative adjustment, the process of internalization is the vector that leads to the development of the implication level, of the persistence degree in the activity and of a positive perception on its own value.

The first part of the study allowed us to detect the main motivational structures but subsequently, on the basis of these structures, we intended to see if and to what extent the academic performance of the students is influenced by these structures. The instrument used to measure the

motivational dimensions has been The Real Motives Test, presented in the exploratory type study. The results of the factorial analysis justify the aspects related to the construct validity of the measured dimensions and enabled us to continue the pursuit of operationalization for the three motivational factors that were identified: *the need of ensuring psychic constancy factor* (NACP), *the need of self accomplishment factor* (NAPE), *the need of incertitude avoidance of actions* (NEIA). The grouping of the ten motivational-value components (measured by Real Motives Test) in three factors is according to the self determination theory (Deci&Ryan, 1985, Ryan&Deci, 2000) and with the thematization of Biggs and Kirby (1984) on the dominant learning styles.

The research hypotheses tested in the second part of the study are related to the motivational factors effect on the academic performance of students. The results showed that the variables *need of self realization* (NAPE) and *the need of incertitude avoidance of actions* (NEIA) led to an effect that is corresponding to other similar results reflected in other researches in the field. This thing validates two of the three hypothesis of the study. Thus, the less deep subjects (with low scores on NAPE) obtain lower academic performances compared with the students who prefer a deeper learning process (high scores on NAPE) – in other words, students with a higher level of intrinsic motivation. This appears because the academic tasks are not stimulative enough and students are not showing a special interest for them. This does not mean that they cannot have interests for other categories of activities or for other activity domains. The weaker academic performance of the students with low scores on NEIA, most probably, is related to the insufficient crystallization of the valuing of the learning act and the fact that the fear of failure is less influencing them. Therefore, their persistence in the academic study is weaker comparative with the students with a high score on NEIA. As a consequence, the academic performance is lower, because the integrative adjustment (which ensures the perseverance in less attractive or easy tasks) is less present.

The third study – The role of intelligence and consciousness as predictive dimensions of academic performance of students

The majority of the researchers in the field agree with the fact that the intellectual and personality aspects must be taken into consideration to make a better prediction of the academic performance (Rothstein, Paunonen, Rush & King, 1994, Chamorro-Premuzic&Furnham, 2005;; Laird,

Pullmann&Allik, 2006). In this study we intended to verify the predictive capacity of the personality factors and of the general intelligence, as well as the manner in which the conjugate action of these predictive dimensions behaves on the academic performance of the students.

The subjects are students in the first academic years at the Faculty of Psychology and Educational Sciences (“Al. I. Cuza” University of Iasi). They completed first the *IPFP* (The Penta Factorial Personality Inventory) and later (in a different session) the *MPR-S Plus* (the Raven's Progressive Matrices – Standard Plus) instrument during the seminar. The students' academic performance was indicated by the first semester average (which was self-reported). The testing was collective and lasted about 140 minutes.

The results were obtained on the basis of hierarchical prediction and they allowed us to identify two statistically significant predictive models: the first model predicts the academic performance only depending on the general intelligence predictor; the second significant predictive model is the one using simultaneously the general intelligence predictors and the consciousness level. Adding supplementary the other personality factors, we obtained a diminishment of the predictive power, which shows that for the investigated population the best predictors are intelligence and consciousness. These two dimensions may reflect the importance of an internal particular structure, with the role to facilitate the academic performance.

To verify thoroughly these aspects, we continued the data analysis, and continued to show the existence of a possible effect of interaction between *the level of intelligence and consciousness*. Thus, in the case of the variable level of intelligence [$F(1,186)=43,16, p<0.001$], the effect is strong, showing that the subjects with a lower level of intelligence obtain an academic performance significantly lower compared with the students having a higher level of intelligence. Regarding the effect of consciousness on the academic performance, things are behaving in a similar way, subjects with a low level of consciousness obtain a weaker academic performance compared with student having a high level of consciousness: $F(1,186)=5,68, p<0.05$.

An interesting result is outlined by how *the interaction effect* between *general intelligence* and *consciousness* is behaving. The only category of subjects on which the level of consciousness does not have an effect is the one formed by subjects with a *lower level of general intelligence*. Thus, for this group, the academic performance is not influenced by the level of consciousness, their semestrial grades being similar. Well, for the group of persons with *lower intellectual abilities* (low effective capacity to accomplish

correctly various tasks that require a certain power of these abilities) however much deliberated, organised and planned, sustained by mobilisation and intense effort, the learning activity cannot ensure a higher performance after reaching a certain level. Moreover, in the case of subjects who are *less conscientious* (being in the situation of the same minimal focalisation on effort, planning and mobilisation) the most intelligent of them obtain anyway a significantly higher academic performance. We can add to this the fact that the semestrial average for the students *less conscientious* but *more intelligent* is *higher* than the semestrial average of the *conscientious* students but *less intelligent*.

A synthetic conclusion of this study can assume that on the early years of youth, the more intelligent students are more performant and only after them, we can consider the students more conscientious. The combination of a high level of intelligence with a high level of consciousness is the optimal structure to ensure a high level of academic performance.

In the Epilogue, the last sequence of this thesis, are synthesised aspects related to the theoretical-methodological framework of the thesis and are presented the most important conclusions for the applicative part. Even if we can discuss on the certain limits of the research (like sampling or lacking of an investigation of certain forms of validity) the results obtained are sufficiently well sustained by the theoretical referential frame and by the empirical data.

We argued and assumed the idea that within the more general theoretical context the trait theories have a higher scientific value compared to other paradigms. In addition, the taxonomies accomplished by the promoters of the penta-factorial models are clearer and have a higher level of exhaustiveness, their verifiability being very high. These are just some of the arguments in favour of the choice of this theoretical context for the empirical investigations presented in this thesis. The investigation of the concept of personality trait offered us the chance to observe the filiations of this term (prefigured in other concurrent paradigms) and to place inside it the concept of motive (by the recovery of the cattellian origine interest regarding the dynamic traits). The use of a personality inventory and of a projective test to investigate the personality structures offered us the occasion to notice the complementarities and the value of these categories of psychological testing.

Based on the procedure of aggregation of subjects, we achieved a theoretical taxonomy of personality patterns which was validated by the

identification of a concrete typology of personality patterns for the population investigated in the research.

The three motivational factors identified in the second study proved to be dimensions which exercise an influence over the academic performance. The third study enabled us to achieve two significant predictive models for academic performance, depending on the level of consciousness and the level of general intelligence (as a measure of the educability degree).

In the future, we are interested to remedy the mentioned limits and to investigate the typical personality patterns for other categories of subjects (different as age, study level). At the same time, it will be useful in a future research to consider simultaneously all de dimensions involved in the three studies for a unique sample of subjects, which would allow a more refined analysis of the relationships between the factors treated in this research.

BIBLIOGRAPHY:

- Aiken, L.R., (2000). *Psychological testing and assesment*. Allyn and Bacon Inc.
- Allik, J., Lairda, K., Realo, A. și Pullmann, H. (2004). Personality development from 12 to 18 years of age: Changes in mean level and structure of traits. *European Journal of Personality*, 18, 445-462,
- Allport, G.W., (1981). *Structura și dezvoltarea personalității*. Editura Didactică și Pedagogică, București,
- Anderson, H. & Anderson, L., (1965). *Manuel des techniques projectives en psychologie clinique*, (trad.), Editions Universitaires. Paris
- Anzieu, D. & Chabert, C., (1992). *Les méthodes projectives*. Presses Universitaires de France, Paris
- Bannister, D. și Fransella, F., (1971). *Inquiring man: The theory of personal constructs*. Penguin
- Bauer, K.W. și Liang, Q., (2002). The effect of personality and precollege characteristics on first-year activities and academic performance. *Journal of College Student Development*, 44,277-290
- Biggs, J, (1978). Individual and group differences in study processes. *British Journal of Educational Psychology*, 48, 266-279
- Biggs, J., și Kirby, J., (1984). Differentiation of learning processes within ability groups. *Educational Psychology*, 4, 21-38
- Brazdău, O. și Mihai, C., (2011). The consciousness quotient: a new predictor of the student's academic performance. *Procedia Social and Behavioural Sciences* 11, 245-250
- Cacioppo, J.T. (2004). Common Sense, Intuition and Theory in Personality and Social Psychology. *Personality and Social Psychology Review*, 8, 114-122
- Campbell, M. M., (2007). Motivational Systems Theory and the Academic Performance of College Students. *Journal of College Teaching and Learning*, Vol 4, No. 7,11-24
- Cattell, H. B., (1989). *The 16PF Personality in Depth*, Institute for Personality and Ability Testing Inc, Champaign, Illinois
- Chamorro-Premuzik, T. și Furnham, A., (2008). Personality, intelligence and approaches to learning as predictors of academic performance. *Personality and Individual Differences*, 44, 1596-1603

- Chandler C.L. și Connell, J.P., (1987). Children's intrinsic, extrinsic and internalized motivation - A developmental study of children's reasons for liked and disliked behaviours. *British Journal of Developmental Psychology*, 5, 357-365
- Conrad, M.A., (2006). Aptitude is not enough: How personality and behavior predict academic performance. *Journal of Research in Personality*, 40, 339-346
- Cosmovici, A. (coord.) & colab., (1972). *Metode pentru cunoașterea personalității – cu privire specială la elevi*. Editura Didactică și Pedagogică, București
- Cosmovici, A. & Caluschi, M. (1985). *Adolescentul și timpul sau liber*. Editura Junimea, Iași
- Cosmovici, A., (1992). Resurse ale psihodiagnosticului, *Analele Universității „Al. I. Cuza” - Iași*, „serie nouă, Editura UAIC, Iași
- Cosmovici, A., (1996). *Psihologie generală*. Editura Polirom, Iași,
- Costa, P.T. & McCrae, R.R. (1980) - Influence of extraversion and neuroticism on subjective well-being: happy and unhappy people. *Journal of Personality and Social Psychology*, 38, 668-678
- Costa, P. T. & McCrae, R. R. (1992 a). Four ways five factors are basic. *Personality and Individual Differences*, 13, 653–665
- Costa, P.T., McCrae R.R. (1992 b), - *Revised NEO personality inventory (NEO PI-R) and NEO Five-Factor inventory (NEO-FFI) Professional Manual*, Psychological Assessment Resources, Inc., Odessa, FL
- Costa, P.T., McCrae, R.R., (1992 c). Multiple uses for longitudinal personality data. *European Journal of Personality*, vol. 6, 85-102
- Dafinoiu, I., (2002). *Personalitatea. Metode de abordare clinică. Observația și interviul*. Editura Polirom, Iași
- Dafinoiu, I., (1999). Personalitatea elevilor. Temperamentul și caracterul. *Psihologie Școlară*, coord. Cosmovici A. Și Iacob L., pp. 53-69. Editura Polirom, Iași,
- Deary, I. J., Strand, S., Smith, P.și Fernandes, C., (2006). Intelligence and educational achievement. *Intelligence*, 35(1), 13-21
- Deci, E.L., și Ryan, R.M., (1985). *Intrinsic motivation and self-determination in human behavior*, NY: Plenum
- De Fruyt, F., Mervielde, I., (1996). Personality and interests as predictors of educational streaming and achievement. *European Journal of Personality*. 10, 405-425,

- De Raad, B., și Schouwenburg, H. C., (1996). Personality in learning education: A review. *European Journal of Personality*. 10, 303-336,
- Digman, J. M., (1990). „Personality structure: Emergence of the five factor Model” in *Annual Review of Psychology*. 41, 417–440,
- Dollinger, S.J. și Orf, L.A., (1991). Personality and performance in ”personality”: Conscientiousness and openness. *Journal of Research in Personality*. 25, 276-284,
- Domuță, A și colaboratorii, (2003). Standardizarea pe populația României a Testului Matrici Progresive Raven Standard Plus, în Raven, J. și colaboratorii Matrici Progresive Raven. *Manual Raven –Secțiunea*. Editura RTS. Cluj-Napoca.
- Duff, A., Boyle, E., Dunleavy, K. și Ferguson, J., (1991). The relationship between personality, approach to learning and academic performance. *Personality and Individual Differences*, 36, 1907-1920.
- Eysenck, M., (1998). *Psychology - an integrated approach*, Addison Wesley Longman Limited, New York
- Eysenck, H. J., (1996). Personality and the experimental study of education. *European Journal of Personality*, 10, 427-439.
- Eysenck, H., Eysenck, M., (2001). *Descoperirea comportamentului uman*. Editura Teora, București.
- Enăchescu, C., (1973). *Elemente de psihologie proiectivă*. Editura Științifică, București
- Farsides, T. și Woodfield, R., (2003). Individual differences and undergraduate academic succes: The roles of personality, intelligence and application. *Personality and Individual Differences* 34, 1225-1243
- Fernandez-Zoila, A., (1996). *Freud și Psihanalizele*. Ed. Humanitas, București
- Freud, S., (1980). *Introducere în psihanaliză. Prelegeri de psihanaliză. Psihopatologia vieții cotidiene*, (trad.). Editura Didactică și Pedagogică, București
- Funder, D.C., (1997). *The personality puzzle*. W.W. Norton Company, New York,
- Furnham, A. și Chamorro-Premuzik, T., (2004). Personality and intelligence as predictors of statistics examination grades. *Personality and Individual Differences* 37, 943-955

- Golf, M. și Ackerman, P. L. (1992). Personality –intelligence relations: Assesement of typical intellectual engagement. *Journal of Educational Psychology*, 84, 537-553
- Goldberg, L. R., (1981). Language and individual differences: The search for universals in personality lexicons. in L. Wheeler (Ed.), *Review of personality and social psychology*, Vol. 2, pp. 141-165, CA: Sage, Beverly Hills
- Goldberg, L. R., (1992). The development of markers for the big-five factor structure. *Psychological Assessment*, 4, 26-42
- Goldberg, L. R., (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26-34
- **Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. C.**, (2006). The international personality item pool and the furure of public-domain personality measures. *Journal of Research in Personality*, 40, 84-96
- Golu, M., (2000). *Fundamentele psihologiei*. Editura Fundației “România de mâine”. București
- Gottfried, A. W., (1985). *Measures of socioeconomic status in child development research: Data and recommendations*. Merrill-Palmer Quarterly, 31, 85-92
- Gottfried, A. W., Gottfried, A. E., Cook, C. & Morris, P., (2005). *Educational charactersitics of adolescents with gifted academic intrinsic motivation: A longitudinal study fron school entry trough early adulthood*. Gifted Child Quarterly, 49, 172-186
- Gray,E. K: și Watson, D., (2002). General and specific traits of personality and their relation to sleep and academic performance. *Journal of Personality*. 70, 177-206
- Graziano, G. W.,(2003). Personality Development: An Introduction Toward Process Approaches to Long-Term Stability and Change in Persons. *Journal of Personality*. 71, 893-1232
- Groth-Marnat, G., (1997). *Handbook of Psychological Assessment*, John Wiley&Sons Inc.,
- Hair, E. C. și Graziano, W. G., (2003). Self-esteem, personality and achievement in high school: A prospective longitudinal study in Texas. *Journal of Personality*. 71, 971-994,
- Hair, P. și Hampson, S. E:, (2006). The role of impulsivity in predicting maladaptative behaviour among female students. *Personality and Individual Differences*. 40, 943-952,

- Harter, S., A (1981). New self-report Scale of Intrinsic versus Extrinsic Orientation in the Classroom: Motivational and informational components. *Developmental Psychology*. 17, 300-312
- Havârneanu, C., (2000). *Cunoașterea psihologică a persoanei*. Editura Polirom, Iași
- Havârneanu, C., (2000). *Metodologia cercetării în științele sociale*, Editura Erola, Iași
- Heaven, P. C. L., Mak, A., Barry, J. & Ciarrochi, J., (2002). Personality and family influences on adolescent attitudes to school and self-related academic performance. *Personality and Individual Differences*. 32, 453-462
- Hergenhahn, B. R. (1990). *An introduction to theories of personality*. Prentice-Hall, Englewood Cliffs, N.J.
- Hjelle, L., Ziegler, J. D., (1981). *Personality theories. Basic asumptions, research and applications, second edition*. McGraw-Hill Book Company
- John, O. P., (1990). The "Big Five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires" in L. Pervin (Ed.), *Handbook of personality: Theory and research*. pp. 66-100, Guilford, New York
- Koch, K., (2002). *Testul arborelui*, (trad.), Editura Profex. Timișoara
- Kosslyn, S. M., Rosenberg, R. S., (2003). *Psychology - The Brain, the Person, the World*, Allyn and Bacon
- Lanyon R. I. & Goldstein, L. D., (1997). *Personality Assessment*. John Wiley&Sons Inc.
- Laplanche, J. & Pontalis, J.-B., (1994). *Vocabularul psihanalizei*, (trad.), Editura Humanitas, București
- Lounsbury, J. W. , Sundstrom, E., Loveland, J. M. și Gibson, L. W (2003). Intelligence, "Big-Five" personality traits and work drive as predictors of course grade. *Personality and Individual Differences*. 35, 1231-1233
- Matthews, G. și Deary, I. J., (2000). *Personality Traits*. Cambridge University Press
- McCrae, R. R. și John, O., (1992). An introduction to the five-factor model and his applications. *Journal of Personality*. 60 (2), 174-214
- McClelland, D. C. (1965). Toward a theory of motive acquisition. *American Psychologist*, 20, 321–333

- Neisser, U., Boodoo, G, Bouchard, T. J., Boykin, A. W. & all, (1996). Intelligence: Knowns and unknowns. *American Psychologist*. 52, 77-101
- Neimeyer, R. A. (1985). *Personal constructs in depression*. In E. Button (Ed.). *Personal construct theory and mental health*. London: Croom Helm
- Nuttin, J., (1985). *La structure de la personalite*, Ed. PUF, Paris
- O'Connor, M., C., I Paunonen, S., V., (2007). Big Five personality predictors of post-secondary academic performance. *Personality and Individual Differences*. 43, 971-990
- Opre, A., (2002). *Noi tendințe în psihologia personalității*. Editura Ascar, Cluj-Napoca
- Papalia, D. E., Olds, S. W., (1985). *Psychology*. McGraw-Hill Book Company
- Peabody, D și Goldberg, L.R., (1989). Some determinants of factor structures from personality-trait descriptors. *Journal of Personality and Social Psychology*. 57, 552-567
- Pervin L. A. și John, O. P., (1999). *Handbook of personality: Theory and Research*. Guilford Press, 1999
- Phillips, P., Abraham, C. și Bond,, R., (1994). Personality, cognition and university students examination performance. *European Journal of Personality*. 17, 435-448
- Piéron, H., (2001). *Vocabularul psihologiei*. Editura Univers Enciclopedic, București
- Pind, J, Gunnarsdottir, E. K. & Johannesson, H. S., (2003). Raven's standard progressive matrices: New school age norms and a study of the test validity. *Personality and Individual Differences*, 34, 375-386
- Potkay, C. R., Bem, P.A., (1986). *Personality: Theory, Research and Applications*, Brooks/Cole Publishing Company, California
- Raven, J., Raven, J. C. și Court, J. H., (2003). *Matrici Progressive Raven*, Manual Raven –Secțiunile 1 - 3 (trad.), Editura RTS, Cluj-Napoca
- Reindermann, H. și Neubauer, A. C., (2001). The influence of personality on three aspects of cognitive performance: processing speed, intelligence and school performance. *Personality and Individual Differences*, 30, 516-530

- Revelle, W. (2009). Personality structure and measurement: The contributions of Raymond Cattell. *British Journal of Psychology*. 100, 253–257
- Roșca, M., (1972). *Metode de psihodiagnostic*. Editura Didactică și Pedagogică, București
- Rothstein, M. G., Paunonen, S. V., Rush, J. C. și King , G. A., (1994). Personality and cognitive ability predictors of performance in graduate business school. *Journal of Educational Psychology*. 86(4), 516-530
- Rozorea, A. & Sterian, M., (2000). *Testul arborelui*. Editura Paideia. București
- Ryan, R. M. & Deci, E. L, (2000). Intrinsic and Extrinsic Motivations: classic definitions and new directions. *Contemporary Educational Psychology*. 25, 54-67
- Rychlak, J. F. & Marceil, J. C., (1986). Task prediction and affective learning style. *Journal of Social Behavior and Personality*. I, 557-564
- Ryckman, M. R., (1997). *Theories of personality*. Brooks/Cole Publishing Company
- Saucier, G. & Goldberg, L. R., (1996). Evidence for the Big Five in analyses of familiar English personality adjectives. *European Journal of Personality*, vol. 10, pp. 61-69
- Saucier, G. & Goldberg, L. R., (1996). *The Language of Personality: Lexical Perspectives on the Five-Factor Model*. in Wiggins, J.S. (Ed.). *The five-factor model of personality: Theoretical perspectives*. Guilford Press., New York
- Sălăvăstru, D., (2004). *Psihologia educației*, Editura Polirom, Iași
- Sternberg, R. J., (1993). Procedures for Identifying Intellectual Potential in the Gifted: A Perspective or Alternative “Metaphors of Mind”. *International Handbook of Research and Development of Giftedness and Talent*, Oxford, Pergamon Press
- Scroggs, J. R., (1985). *Key Ideas in Personality Theorie* West Publishing Co., Minnesota
- Șchiopu, U., (2002). *Introducere în psihodiagnostic*, Editura Fundației Humanitas, București
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., & all, (1992). The academic motivation scale: a measure of intrinsic, extrinsic and

- amotivation in education. *Educational and Psychological Measurement*. 52, 1003-1017
- Wiggins, J. S., (1984). Cattell's system from the perspective of mainstream personality theory. *Multivariate Behavioral Research*. 19(2-3), 176-190
 - Wiggins, J. S., (1996). *The five-factor model of personality: Theoretical perspectives*. N.Y., Guilford
 - Wiggins, J. S. și Trapnell, P. D., (1997). Personality structure: The return of the Big Five in R. Hogan, J.A. Johnson, & S. Briggs (Eds.). *Handbook of Personality Psychology*. CA: Academic Press., San Diego
 - Wolfe,, R. N. și Johanson, S. D., (1995). Personality as predictor of college performance. *Educational and Psychological Measurement*. 55, 177-185
 - Zlate, M., (1997). *Eul și personalitatea*. Editura Trei