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Bd. București, No. 39, Ploiești, Romania
Tel.: 0244/575.598; Fax: 0244/575.847
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Self-Identity and Affect in the context of teachers' professional development

Inés M. Gómez-Chacón^{a*}

^a*Mathematics Faculty, Complutense University of Madrid (Spain) Plaza de Ciencias 3, 28040 Madrid, Spain*

Abstract

Learning to teach is a complex process which has to be addressed from a holistic viewpoint, taking into account different interrelated components: cognitive, didactic, technical and affective. In this talk, I report on the development of tasks to promote the self-identity of mathematics teachers in mathematical learning, within the context of teachers' professional development in mathematics. A set of design heuristics for educational materials is presented to enhance the overall design of this kind of material d in the classroom with prospective teachers and teachers in-service.

Keywords: mathematics teaching development; affect; teacher identity; teacher education

1. Introduction

I am honored and grateful to have been invited to this conference, whose title "Education and Psychology Challenges-Teachers for the knowledge society" is very challenging. This conference allows me to reflect on, and exemplify, themes which have been central to my work from when I started out in educational research almost 20 years ago: research focused on the affective dimension in mathematical thinking. If this is carefully framed it allows us to have a more holistic view of the individual and provide insights on its implications in teaching and learning.

When thinking about the content of my talk I decided to choose the topic Teacher self-identity not only because it has been a challenging question in my research, but also because the scientific community, organizing this Fourth International Conference, has posted some open questions which we need to think about and make proposals on regarding teaching development programs.

Affective variables have certainly been shown to play a role in learning for a 'sustainable education'. When teachers design learning opportunities, when they reflect on teaching situations or when they act and react in the classroom, they are likely to draw on their professional knowledge, including their identities, their epistemological beliefs and teaching-related views.

This speech tries to contribute to the development of task design within mathematics programmes for teaching development, incorporating the emotional dimension systematically. The issue will be addressed through the response to two questions: In the context of teaching development programmes, is it possible to design open and explorative tasks around core concepts with which the self-identity of the mathematics teacher may be promoted? How can curriculum materials be designed to support teachers' learning about their own self-identity?

2. Teacher learning and teacher knowledge

Teachers need a thorough knowledge of their subject matter, but they must also develop pedagogical knowledge and pedagogical content knowledge (PCK) (Shulman, 1986; Ball, Thames, & Phelps, 2010). Several researchers claim that

* Corresponding author. Tel.: +0-000-000-0000 ; fax: +0-000-000-0000
E-mail address: : igomezchacon@mat.ucm.es

mathematical knowledge, pedagogical knowledge and affective factors are closely intertwined and have a strong influence on teachers' professional practice (Tsamir, & Tirosh, 2009). Professional development programmes in mathematics teaching, if limited to cognitive and pedagogical issues, are "doomed to failure unless placed within an affective framework in which teachers have space to question the nature of mathematics and of mathematics teaching" (Hodgen & Askew, 2006, p.41). Some researchers particularly explore the links between a teacher's identity and the teacher's affect and practice in the mathematics classroom (cf. Frade, Roesken et. al. 2010). Identity formation is situated within practice, and strongly involves affective components such as beliefs, emotions, motivations, dispositions and attitudes (Frade & Gómez-Chacón, 2009). For teachers to be effective – reflective and transformative – agents of their practice, they must be aware of how their 'mathematical' affect influences their practices, and influences the constitution of their mathematical professional identities. For this reason, we chose the context of pre- and in-service teachers' professional development as our special focus.

3. The design of educative materials: some high-level guidelines

As defined by Mason (1998), teachers' professional development is regarded here as development of attention and awareness. The teacher's role is to create conditions in which students' attention shifts to events and facts of which they were previously unaware. Viewed in these terms, teaching itself can be seen as a path for personal development. I agree with Watson and Mason (2007: 208) when they claim: "Although effective mathematical tasks for teachers share many of the features of effective mathematical tasks for learners, tasks for teachers also serve a higher-order purpose. To become an effective and professional mathematics teacher requires development of sensitivities to learners through becoming aware of one's own awareness".

I do note that we are working with 'professional knowledge', and therefore, I must work with the consideration of designing practical ways that the student-teacher, as well as the student, must develop so that a teacher can put that knowledge to use in the future with other pupils. In our proposal of teaching development, where the emotional dimension has been integrated in pre-service and in-service programmes of professional development (Gómez-Chacón, 2000 and 2006, 2010), we had articulated knowledge, domains, and method with a three-fold dimension:

1. Education of awareness of themselves: to activate internal process about personal experiential learning.
2. Education of awareness of the discipline: competence in the use of the processes of mathematical enquiry, understanding of the content of mathematics and the area to which it is being applied.
3. Education of awareness in accompanying others: learn to teach and how to develop the children's awareness in action.

From this perspective, we are seeking to study mechanisms of change in global affective structures pertaining to mathematics. We consider that there are key processes in which students will be trained for the development of their mathematics teacher-self (identity) as future teachers in mathematics: identification processes, rupture and continuity processes regarding mathematical learning experience and exploration, and commitment and assessment processes related behaviour with task and the organization.

In different studies we observed that social image of Primary school education prospective teachers could affect the group adversely (Gómez-Chacón, 2006; Gómez-Chacón and Frade, 2009). These authors have found that pre-service teachers (identity elements) tend to be characterized by low mathematics proficiency. These students often feel they are unable to learn mathematics or are even mathematics-averse. They also tend to express a strongly biased view of teaching and mathematics.

Students' self-understanding or dynamic sense of personal identity is believed by the present author to play a crucial role in the formation of their professional identities. A "dynamic sense of personal identity" is meant to consist of both self-

understanding at a certain time (product) as well as the fact that this understanding is the result of an on-going process of making sense of one's experiences and their self-impact. The contention is that this dynamic sense of identity strongly influences education students' attitudes and the manner in which they face their professional future. The pursuit of operationalization in the exploration of the interaction between personal and professional identity is a key feature of the present study.

4. Didactic programme for a mathematical curriculum

The programme was designed in 2006 and has been implemented since then (Gómez-Chacón, 2006, 2010, 2016). The central aim of the programme is to specify as much as possible how to learn to teach Mathematics within the three levels (cycles) of Primary Education, and how this specification of the subject 'The Teaching of Mathematics' is required to be treated in view of the three organizing principles (axes), namely:

- To enable students, becoming teachers, to make rational decisions on what they teach and how they teach it.
- To train the students, who are becoming teachers, in their growth in conscious awareness: self-awareness, awareness of discipline, awareness in guiding others by teaching them to learn, and by learning to learn.
- To develop the professional identity of the students, becoming teachers, through a continuous reflection of their professional role and their specific vocation.

The selection and sequence of the contents here specified, as well as the teaching methodology, are based on our previous decisions. The contents of the subject have been organized into three micro-cycles.

Microcycle 1: Ways of understanding, thinking and working in Mathematics

Microcycle 2: Thematic aspects corresponding to content units within the Primary Education curriculum.

Microcycle 3: Identity and professional development of the teacher, the person and the task in a unified process.

The topic of the identity and professional development of the teacher is addressed in the third microcycle. Different components are to be integrated: the institutional and the social components, and the personal component, to which I give priority. This micro-cycle considers mathematics educators in themselves, in their capacities for teaching, and in the development required to be an expert in teaching, and it includes three topics:

Topic 1. Traits of the professional-vocational identity of the mathematics teacher. These traits are identified through key experiences by various teachers of mathematics, manifesting the social component as well as the personal component of the profession; within the latter the subjective approach that teacher gives to his or her own profession-vocation is concretely specified.

Topic 2. Awareness and auto-recognition of the professional roles and tasks of the mathematics teacher. Determination of the main conditions required to transmit, acquire and construct the professional practices and behaviour proper to the teaching of mathematics.

Topic 3: Development of social capacities and skills required for teaching. The main focus here is on the social component (professional and social behaviour) and on the personal component (attitudes and creative capacities).

Each of these topics are developed in the following sections: Presentation, Specific aims, Contents, Introductory activity, Development activities, Reflection, Theory put into practice, To read and think, Implications for the class.

5. Design heuristics for didactic mathematical curriculum illustrated with examples.

We described these high-level guidelines to develop an initial set of nine design heuristics intended for specific design decisions for educational materials. We organized our heuristics around important parts of the teacher's knowledge base such

as was described in the previous section and we focus here on educational strategies. The substance of a design heuristic is that each one includes three components: it indicates what the curriculum materials should provide for a mathematics educator, how curriculum materials could help educators understand the rationale behind the recommendations, and how teachers/educators could use these ideas in their own teaching. This set of nine heuristics does not claim to be exhaustive in coverage or domain.

I. Design Heuristics for Education of self- awareness to activate internal processes about personal experiential learning

1. Supporting teachers in self-image as prospective teachers
- 2- Supporting teachers in order to improve higher Self-esteem
3. Supporting teachers in thinking about feeling: the emotions in learning
4. Supporting teachers in gaining insight into their job motivation
5. Supporting teachers in task perception

II. Design Heuristics for Education of awareness of subject matter: competence in the use of the processes of mathematical enquiry, understanding of the content of mathematics and the area to which it is being applied.

6. Supporting teachers in becoming aware of the conceptions and beliefs in mathematics

7. Supporting teachers in the development of subject matter knowledge

III. Design Heuristics for Education of awareness in accompanying others: learn to teach and how to develop the children's awareness in action.

8. Supporting teachers in thinking about feeling: the emotions in teaching.
9. Supporting teachers in anticipating, understanding, and dealing with students' ideas about mathematics and mathematical thinking.

6. Tensions in designing didactic curriculum materials

Three main and interrelated tensions arise in considering the design of these materials: tensions in determining an adequate amount of guidance and prescription to meet the basic needs of the math educator who will use them (including design principles and techniques, heuristics and professional vision); tensions in the interfaces between the teaching and researching; and tensions in knowing whether these materials really promote teachers' learning. These materials have a greater emphasis on helping mathematics educators add new ideas to their repertoires and the official curriculum that does not include this affect and identity dimension in pre-service teachers' professional development. We consider that these materials might include more extensive support for developing the many components of PCK. And finally, they have been tested empirically but they must be used by a larger number of prospective teachers from different cultural contexts or complemented by different opportunities for professional development, compared to one another.

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Timeline: students' misrepresentations of chronology

Ligia Sarivan^a, Cristian Voica^b, Florence Mihaela Singer^{c*}

^a*Institute for Educational Sciences, 37 Stirbei Voda Str., 010102, Bucharest, Romania*

^b*University of Bucharest, 14 Academiei Str., 010014 Bucharest, Romania*

^c*P.G. University of Ploiesti, 39 Bucuresti Bv., 100680, Ploiesti, Romania*

Abstract

The understanding of time-related issues is an important dimension of real life today for both children and adults. We analyze a large number of items from the last three editions of the primary school national contest (and large scale assessment) The Exploring Kangaroo. After a selection that was oriented by the participants' low scores, in an otherwise successful overall result (with average scores that top 80%), we picked up a number of cases that are time-related items. The latter seem to be very difficult for students when they involve mental positioning on the timeline. The questions become even more difficult (sometimes with scores under 50% rate of success) if the representation of chronology involves past-oriented components. Our findings match some previous results we documented before (EPC-TKS 2015) as well as the outcomes from TIMSS and PIRLS. We conclude that time-related misunderstandings are likely caused by wrong data representations.

Keywords: reading processes; problem-solving processes; time-related learning issues.

1. Introduction

The students' learning difficulties can be identified through large scale tests, namely by selecting and analyzing the items with generally low scores. In this perspective, our paper makes use of the data collected in a rather popular contest in Romania – the Exploring Kangaroo that is addressed to students in primary school. The integrated tests aim at a meaningful competence-based assessment, are developed around a situational topic for each grade and are vividly illustrated with visual information along with short verbal texts. 24 items for the first three grades and 30 items for the last primary grades challenge the young learners to use their reading, math and science, cultural and social/civic competences.

Thousands of children participate every year in the Exploring Kangaroo on a voluntary basis and obtain quite high scores for the overall performance (80% success or more for most of the items). At a first glance, the results seem to contradict those in the international studies. TIMSS and PIRLS data (Mullis & al, 2012a; Mullis et al, 2012b) show that Romania's results are at the international average, yet behind most of the EU countries and the former communist ones. This quick comparison could lead to the conclusion that high motivation and individual choice do make a difference when it comes to school success and reverse the state of the arts in the Romanian school. Nevertheless, at a more thorough examination, we notice that some items constantly trigger lower scores in various editions of the Exploring Kangaroo. Thus, our research question is: What are the features of the items the participants have difficulty with, and are these similar with those of the international studies?

There is more than one typology of the Exploring Kangaroo "difficult" items, but, given the space limitations, this paper examines the questions focusing on the time dimension only.

* Corresponding author. Tel.: +40-723-542-900; fax: +40-213-139-642.
E-mail address: mikisinger@gmail.com.

2. Methodology

Our objective is to analyze the items and corresponding scores in the last three Exploring Kangaroo contests that deal with time data. In doing so, we try to identify the type of difficulties the learners encounter with this matter. The students' numbers involved in the contest are shown in Table 1. Since the participants are solely self-selected by the interest in the contest, the Exploring Kangaroo does not benefit from a representative national sample to allow generalizations for the entire primary school population. The high numbers in Table 1 as well as the national distribution of the contest offer nonetheless research meaning to the data analysis and conclusion.

In the data analysis, we start by scanning all the items from the three contests. Given the typically high scores in the Exploring Kangaroo we select only the time-related questions for which the results are 65% success rate or below. For the selected questions we develop cases where we can detail the learning issue. The criteria of our analysis originate from the two main competences that are integrated in each item, namely reading comprehension and problem solving.

For reading we take into account the following: reproduce an item/ chunks of cultural information, identify explicit information, make straightforward inferences, interpret and integrate the information in the text, and evaluate the content of the text.

For problem solving we consider: identify concepts, primary processing, apply an algorithm, secondary processing, transfer. We analyze the selected items from the perspective of this double set of criteria and their subcategories that relate to the verbal/ visual display of information and the cognitive path of the distracters.

Table 1. Students participating in the last three Exploring Kangaroo contests

SCHOOL YEAR	2013-2014	2014-2015	2015-2016
Nr. of students	11 743	14 050	2 699

3. Results and discussion

The time-related items that we analyzed can be subcategorized within the following typology: include an activity in a time interval (day, month, season); correlate a day of the week with a date (sometimes by reading it from a calendar); calculate the duration of a time interval which is expressed in years, days, hours and/or minutes; determine the time when an activity starts or is completed. Out of the total of 324 items that are given overall in the last 3 years tests, we identified 24 time-related questions (i.e. 7.4%). There are many items in this category (actually half of them) where correct answers scores top 81%. This is no surprise since in 194 out of the 324 items (about 60%) the scores are above 81%. These records can be explained by the fact that in many of these questions the relevant information is explicitly given (making reading very easy) or it is a cultural fact that does not involve the reading process at all, such as: Which are the months of spring? (The Little Explorer, 2016, p. 31).

3.1. Case analysis

Given the space limitations we only detail some cases from a small number of problems. Firstly, we analyze two items that ask the students to identify the day when an activity takes place.

Item 1 (grade 1, 2014-2015). When will the children leave for the zoo? A) Wednesday, April 8; B) Wednesday, April 7; C) Tuesday, April 8; D) Tuesday, April 7; E) Monday, April 6.

The problem solving process requires students to correlate the chunks of information from the visual text (the bubble and the calendar in the drawing) with

culturally-related data, i.e. the days of the week sequence, the calendar sheet displaying the current day (see Figure 1). The statistical data in Table 2 show that 41.8% of the participants cannot make the needed correlation. The students stop at the first distracter and select it as the correct answer.

Item 2 (grade 2, 2014-2015). When does the project take place?

A) Tuesday; B) Wednesday; C) Thursday; D) Friday; E) Saturday.

In item 2, the relevant information is offered in the image caption (Figure 2). More precisely, the text includes a temporal positioning of some events, i.e. the Wednesday announcement about an activity that will take place later, in two days time. The question changes the temporal reference and asks the problem solvers to position themselves within the time sequence when the activity takes place. The statistical data in Table 2 show that the 2 graders fail to mentally represent the adequate timeline. Only 19.5% of the participants identify the correct answer; most of the children (63.4%) chose B, which corresponds to the announcement date instead of the event date (which is required). It is a pity the item developers did not pick a “Monday” distracter that could have highlighted the understanding of the information but a misrepresentation by reversing the timeline!

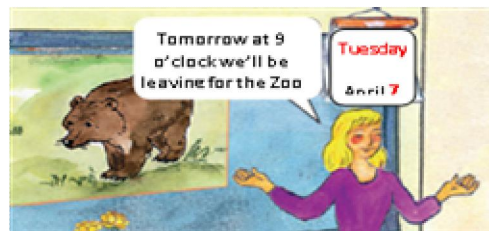


Figure 1. Visual data for Item 1

Bianca, Bogdan, Radu, Vlad, Elena and Iulian found out on Wednesday, October 28, that in two days time they were to participate in the project “A more beautiful park”. They need to help taking care

Figure 2. Text for Item 2

Table 2. Statistical data for Items 1 and 2

	A	B	C	D	E	NA
Item 1 (%)	48.2	3.5	4.6	41.8	0	1.8
Item 2 (%)	2.4	63.4	7.3	19.5	4.9	2.4

Secondly we present two items that focus on the beginning or completion of an activity. The needed information is offered in verbal texts or images, such as the blocks in Figure 3.

Item 3 (grade 3, 2015-2016). When will the children meet for their bike ride? A) 8:30 B) 9:00 C) 9:15 D) 8:00 E) 8:45

In order to solve the problem, the students should correlate the information in the text (one of the comments) with the visual information (from the clock). Then they have to represent the events sequence in order to identify the time of the meeting which is to take place before the present moment.

Table 3 highlights that 42.4% of the participants fail to consider one of the children’s comments as a relevant piece of information: they correctly read the clock but cannot evaluate the content of the statement.

Some other students (7.5%) are likely to have managed to interpret the visual and verbal information but do not have an understanding of the timeline direction: they add instead of subtract the 15 minutes. The rest of the wrong answers were probably picked up randomly

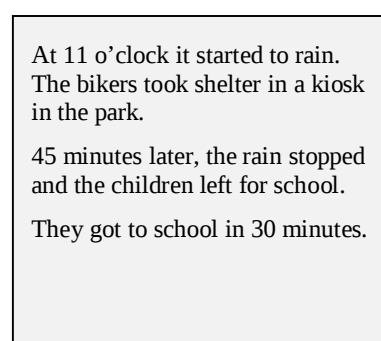
Table 3. Statistical data for Items 3 and 4

	A	B	C	D	E	NA
Item 3 (%)	1.1	42.4	7.5	2.9	45.3	0.8
Item 4 (%)	7.6	7.5	12.2	66.3	5.7	0.6

Item 4 (grade 3, 2015-2016). When did the children come back to school?

A) 11:45 B) 11:30 C) 12:00 D) 12:15 E) 12:30

Two thirds of the participants (66.3%) chose the right answer. Distracters A and B, picked up by 15.1% of the students, show the partial selection and subsequent processing of the information. We notice here a "shallow problem solving" that marks the superficial data analysis and also a difficulty in representing the time on the clock face or in the digital version (each of these being nevertheless segmentations on the timeline). We notice that Item 4, that requires a future-oriented perspective on the timeline, has better scores than Item 3 that is past-oriented. Apparently students can better "read" the timeline when it flows in the ordinary direction.

**Figure 3.** Visual for Item 3**Figure 4.** Text for Item 4

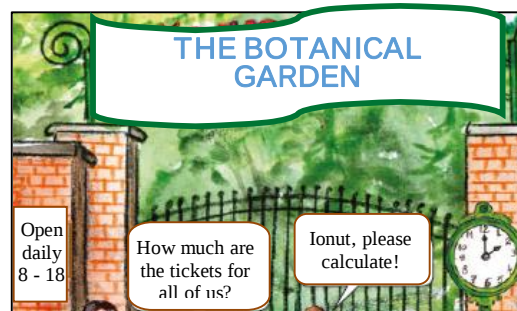
Thirdly we analyze two items that refer to the duration of an event.

Item 5 (grade 1, 2014-2015). For how long is the zoo open every day?

A) 4 hours; B) 5 hours; C) 6 hours; D) 8 hours; E) 10 hours.

Item 6 (grade 1, 2013-2014). For how long can they visit the Botanical Gardens?

A) 10 hours; B) 2 hours; C) 3 hours; D) 4 hours; E) 6 hours.

**Figure 5.** Information for Item 5**Figure 6.** Information for Item 6

For a correct Item 5 solving, students should identify explicit information and perform a subtraction (see Figure 5). 12.8% of the students chose E (10 hours), most likely by picking up one of the numbers in the timetable.

In Item 6, students should correlate the visual data (the timetable and the clock) with the implicit information (the activity takes place during the day). One fifth of the

participants (20.8% - see Table 4), who chose distracter A, do not take into account the various pieces of information and simply compute the visiting time. On the other hand, answer E shows a possible difficulty in handling the a.m. and p.m. times (18:00 is interpreted as if 8:00). If we compare the two problems we notice again that an important part of the children in our sample partially select and superficially process information.

Table 4. Statistical data for Items 5 and 6

	A	B	C	D	E	NA
Item 5 (%)	2.5	1.1	6.4	74.1	12.8	3.2
Item 6 (%)	20.8	5.3	4.6	56.0	11.5	1.8

3.2. Discussion and conclusion

The scores in the Exploring Kangaroo mirror the same learning issues that are revealed by the international studies when it comes to the temporal dimension. For instance, the PIRLS 2011 data base (Mullis, 2012a) shows that the Romanian children score below the international average and are far behind their EU counterparts when it comes to order the events in a story or the steps of an experiment; this finding can be compared with mishandling data from tables or various other graphic organizers. The grade 4 TIMSS 2011 (Mullis, 2012b) results show a similar tendency. Overall, the Romanian 4 graders score lower than the international average and when it comes to time-related questions, the results are even lower. This can show difficulties in understanding the number line as well as moving on this axis.

In terms of cognitive processing, the difficulties discussed in 3.1 relate to data display issues (Singer, Voica & Sarivan, 2015) and it is likely that time-related misunderstandings be caused by faulty data representations. Students need support to overcome such misconceptions in the first grades.

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The clock, the cloud and the Way Paradigm in education

Maria Butucea^{a*}

^a*Teacher Training Department,
Technical University of Civil Engineering, Bucharest, Romania Lacul Tei B-dv, No.122-124*

Abstract

There are many paradigms in education which orient research and practice. Therefore they are listed in the literature as two groups taking as criterion the methodology they use. If we enlarge the concept of paradigm, including the philosophical vision there are also two groups, which we can call Clock paradigms (Cartesian vision) and Cloud paradigms (Relativist vision). Both groups of paradigms have successes and failures, too. Even paradigms are not predictable they can be recognized at deepest level of culture and we can study presuppositions /assumption of members of society. Due to presuppositions which are strongly changed nowadays, we can find the configuration of a new paradigm - Way Paradigm. Mostly paradigms in education are just borrowed from mature science. But some philosophers and historians have been emphasized recently de-constructionist point of view regarding science and how the big science should become less authoritarian among others. New generation share new believes and assumptions regarding life, society and schooling. We try to emphasize in this reflexive approach, that in order to reveal presupposition, we must search what people value and how they are behaving. So far, we hypnotize that the role and place of education in the social system could be changed also. The name of this Paradigm is inspired by Daoism and the image of it could be well described by the philosophical Chinese concept "wuwei".

Keywords: paradigm, presupposition, generation, education.

1. Introduction

Reviewing the history of educational sciences and focusing in difficulties in research that had been doing over the time, we found a paradigmatic difficulty as philosophical assumptions or vision. Discussions in literature about paradigm are mostly methodological, less regarding the objects of research. So far, Hegel said once that method is the essentials of the system. The object of inquiry can create the methods. In our opinion the vision, conception regarding object of inquiry is nevertheless very important.

This approach might be an invitation for educationist to learn from history of science, about its successes and failures that had occurred over the times and also an invitation to deep reflection on events of real life and school. Since Thomas Kuhn proposed this concept to study history of science in "The structure of scientific revolution" (Kuhn, 1962, 1976), it becomes an academic fashion and it migrates in all domains including sciences of education. Kuhn produces several meanings for concept of paradigm and different area of research adopted different point of view. What is the meaning of the concept "paradigm" in the field of educational research?

2. The concept of paradigm in educational research

The concept of paradigm, firstly used by Kuhn refers to an overall theoretical research framework. In this paper, we will employ Mackenzie and Knipe, definition of a paradigm as "a loose collection of logically related assumptions, concepts or presuppositions that orient thinking and research." (Mackenzie & Knipe, 2006) We

* Corresponding author. Tel.: +40 0734 048286
E-mail address: dppd@gmail.com; marrbu23@gmail.com

will discuss in this paper more about assumptions taken by grant and their consequences in educational field and how it can orient people in their practice.

However, in the literature of sciences of education and social sciences as well, there are noticed some paradigms: positivism and post-positivism, constructivism, structuralism, interpretative, transformative, emancipatory, critical, pragmatist and de-constructivist. (Husén, 1988; Heshusius, 1989, 2016, Niglas 2001, Mackenzie & Knipe, 2006) Summarizing, we think is better to talk about two groups of paradigms. The first group is strictly described as logic, using quantitative methodology and another one as contextual with more quantitative methodology or mixed.

Philosophical speaking, first group is, in metaphorical expression, as the group of Clock Paradigms that are sharing the vision of the matrix of Newtonian-Cartesian approaches (positivist and post-positivist, constructivist, post-constructivist). The second is the group of Cloud Paradigms (interpretative, transformative, de-constructivist, post-structuralism and pragmatic) that are following the mirage of large possibilities of study and practice whatever from reality. Temporally, both groups of paradigms can co-exist in 19th and 20th centuries and after. So, in this approach, we will focus on presupposition in extended view, considering more elements like: cognitive ideas as purpose, goals of education and person; visions regarding object/subjects of scientific inquires and in educational field; believes shared by students, parents, teachers regarding education and his role and place in society.

3. Believes in the paradigms' matrix and their consequences in educational field

The group of Clock Paradigms leads to an image of rationality (Cartesian meaning) because all logic paradigms are products of modern science. Some call it "mechanistic" paradigms, after successful part of physic called "mechanic". In these paradigms the central assumption is that: the world is like a machine with visible elements that works well and make system predictable (the clock). The science is an autonomous enterprise and knowledge means inquiry's product. Humanities must also become sciences and embraced positivism as philosophical background. The world can be understood rational and we perceive and conceive including society, like a mechanism (bureaucracy), and the mind as a "black box" with its sophisticated mechanism into it.

How about sciences of education? The perspective opened by this first group of paradigms lead to the suggestion that we should conceive education as a autonomic system which is producing educated mind, good people for economy, another system of big clock of society in order to make it to work well. Teaching and evaluation of outcomes are logical - rational process. School is a fabric of people/minds forward provided to economic system, which is the most important part of a global social mechanism. And all these had happen because we were trapped in cultural cognitive believes (paradigm) regarding knowledge; the vision how society is organized, who control whom and what kind of individuals we are. It settles that we must be rational beings and we must remain rational in our places.

These paradigms shaped the minds during generation's life. We can see how generation use to believe and act accordingly with their presupposition regarding knowledge, education and social integration. Some authors settled taxonomy with five generations living in 20th – 21th centuries: The silent/veterans /traditionalists (1925-1945); Baby boomers (1946 - 1964); Generation X (1964 - 1979); Generation Y /Millennial /Internet generation (1980 – 1994); and Generation Z (1995 - 2005). (Ryder, 1965; Strauss & Howe, 1991; Griffiths 2012 as cited by Duse & Duse, 2017)

The three of them, first and second war generations and post-war also share some assumption regarding education and schooling related to social integration like these: they must learn in school, because the job is important for their life; if you follow the rules, you'll be the winner. So, people must be respectful to authority, be loyal, work hard and sacrifice themselves for the common good. For them it available the slogan: "live to work, not work to live". The personal wellbeing depends on economic and also politic and people trust in. (Duse & Duse, 2017)

The consequences for education field are the following:

People are conceiving themselves as “machine” using patterns and standards; if there is a unique methodology for all sciences to produce meaningful scientific outcomes, education must use this set of methods; in textbooks there are all we need to learn; education should have a specified role in the global system; researches in educational sciences succumbed under too much idealized requirements of methodology.

The second group of Cloud paradigms could include paradigm like interpretative, transformative and pragmatic. The shift of vision came from mature science. Discussions regarding scientific knowledge open new perspectives. Since last decades in a 20th new perspectives open new path for research in sciences (Lyotard, 1984; Maxwell, 1984 as cited by Ronald & Søren). From “knowledge inquiry”, used before as the meaning of scientific activity, is shifted to another conception which operates by new meanings “aim-oriented inquiry,” and “ethno-oriented inquiry” that should be understood and pursued by researchers in educational field, too. After the book led by Gibbons scientists embraced a dynamic conception of knowledge production. (Gibbons, Limong, Nowotny, Schwartzman, Scott & Trow, 1994 as cited by Ronald & Søren), “A key term, indeed, in this account of knowledge was that of transgressivity (...) now, knowledge may be understood to be a mere assemblage, a bricolage of discrete elements, picked up and pasted together to serve heterogeneous purposes, in different situations.” (Ronald & Søren, 2017, p. 3)

It is well known from quite some time, that the object of inquiry in the social groups needs to take in consideration values, desires, intentions, Transgressivity is everywhere now in any researches. The study, research in educational field, more than others, requires revealing purposes, objectives and means to achieve it. The methods are less quantitative, but much subjective and qualitative. The ideal of knowledge and education are more liberal and human beings are conceived having much opportunities and choices to follow personal ideals, but they should fit finally in a big matrix of society.

The philosophical point of view regarding the world is that events can be estimated statistical and sometimes unpredictable (the metaphor “cloud” as Karl R. Popper proposed). Here we can include partial generation X and entire generation Y. Students believe that the real value is “to have free time and more fun”. The main assumption is ‘work to live and not live to work’. They ask themselves questions, they do not accept to take things as they are. (Duse & Duse, 2017) Educationists are puzzling how to improve school, meanwhile some students give up and follow different paths and are looking for the easier way of dealing with life problem.

The consequences for education field are the following: More meaningful researches about school /student /curriculum; many changes in system, school, students /teachers’ roles; there is still using “rational” ideal of cognition, but some results produce polar attitude personal level (hippy culture in the ‘60th is prolonged till nowadays); economic system asks more high qualified workers; deep gap between graduated and no graduated people. Sometimes genius and creative mind rise out of the school (in a garage!).

Therefore, we can conclude that paradigms for research, design education and practice are based on different assumptions and they are shared with big science in evolution (Newton-Descartes-Kant vs. Popper, Einstein). The group of Clock paradigms as vision always tricks our minds and puts us in a circular way giving the model and the tools and asks us to make a „chair” or a „box” and after that push events to set on or enter in it. The second group of paradigm, as cloud, is like walking around in a dizzy way for a while and after that, at the end, to fit in the inevitable matrix. What vision should embrace researchers in educational sciences, designer of curriculum or teachers and managers of school? The vision regarding object of inquiry as unchangeable, predictable, secure are not proper anymore for complexity. The statistical relativistic vision, less predictable, less stable still force mind to capture dichotomies good /bad or successful /unsuccessful student /school /system of education. Might be a new paradigm that we should embrace, the Way paradigm and take everything as they are, supporting any possible evolution.

4. The Way Paradigm, social events and new assumptions

Science is not conceived anymore as a block of unique enterprise, but it is somehow the ruler of minds. It means it is still authoritarian to other enterprises and could influence them. Therefore, assumptions which affect science also affect assumptions, believes regarding society. The granted social believes in Cartesian and also Relativist paradigms assumed was this: economic and politic systems are more important for global system.

The consequences in previous paradigms of thinking were: Education must feed the needs of economy and decision makers are settling how to do; people must pursue community goals in order to be happy. Society control and ensure the happiness.

Recently, some philosophers and historians or practitioners have been emphasized de-constructionist points of view. (Radin, 2009; Jorjani, 2016) Dean Radin claims that there is time for a new science conceived as “wholeness science” instead “orthodox separateness science”. (Radin, 2009) Young researcher James Reza Jorjani proposed the concept of “spectral sciences” which should include study of parapsychology, mystical or religious phenomena and also the concept of “organic state”, where every social subsystem should be conceived as equals. Jorjani endeavours to de-construct the nihilistic materialism and rootless rationalism of the modern period of time in West by showing how it was grounded on a dishonest suppression of the spectral, other possible attitude, culture, and way of making possible science. (Jorjani, 2016)

These new conceptions put all subsystems of society as equal: economy, politic, education as parts of a living being -society. Mankind is in transition period to this “organic state”. We can see, nowadays, that there are crises and debates everywhere and facts and events, apparently, evolve in that direction.

Everybody knows that, nowadays we encounter a new type of information, due to new devices (smart phone, tablet, and computer) and the access to information is much larger than before. Many years ago scientists and social futurist researcher have emphasized about the power of information, but never talk about how it can overpass the economic zone and political zone. Nowadays, power is in our devices. More then, in real life, not everybody is occupying a job or running business. We can notice how rich, educated people chose to return in nature and value nature. Happiness is living closed to nature instead having good jobs in cities.

Meanwhile there are books which explain the challenge produce by network social media and how can it enlarge public space and become a challenge for politicians as “complete democracy” (Cardon, 2010). Economy already accepts to transform itself pushed by pressure of previous generation: On-line business, bit coins and there are philosophical debates regarding the robots’ rights, if they will become majority of employee as Élan Musk, manager of Tesla Company suggests. Access to information /knowledge it is a “right” for everybody not only a way to become “capital” for companies. Our point of view is that economic and politics could be over passed by education or auto-education (new person /mind enabled by high-tech.) The receptor device and human being working together can create a new person /subject with new assumptions.

The generation Z (people born 1995–2005) and his assumptions make a new revolutionary shift. They think the world “did not exist before technology”. A brief characterization of a new brain, sculptured by high-technology is like the following: Preference of computer instead toys/school/books; intuitive learning, synthetic use of information instead analytic; the work is starting already in high school; the communication is largely virtual – create links with members of other cultures, which they consider integrated into a global culture group, in which all individuals are equal in terms of identity; they see the world as a multitude of possibilities. (Sparks & Honey, 2014; Burrus, 2016 as cited by Duse & Duse, 2017)

The main believes of this youngsters Y and Z generation are: we can do/ create our future as we wish. We do not trust anymore our parent, teachers, politicians. We can be responsible for environment, better life, privacy etc.; right knowledge is provided to us by the social system as large (school, internet, new experience, new culture). So, we are able to find our Way.

Educationist, teachers, parents are feeling frustrated, puzzled by the behavior of youngsters. Paradoxical events have occurred like parents and teachers who learn from child, students! "The child shows the way to elder" is the title of an old Chinese picture, we found visiting Saolin, full of wisdom we ever seen during our stay and teaching in China.

Regarding the place occupied by politic and the role of politician is diminished. Even teachers think that education never has been a priority in global system as they demagogically said in official regulation. De-constructivism in theory is doubled by losing trust in political actions.

We must assume complexities, uniqueness, transcultural approaches and accept plasticity of the human brain. Apparently, we encounter war between paradigms.

5. The Chinese concept "wuwei"

The Chinese concept "wuwei" could describe the Way Paradigm, which are going on. In many Chapters of the book "Dao De Jing", written by legendary philosopher Lao Zi, we can find the invitation to follow the natural path of developing things. (Legge, 1891, Chapters 17, 18, 23, 33, 36, 37, 39, 47) The main concept is "wuwei" which can be understood as an attitude, an orientation of our actions regarding human relation with entire Universe and social realm as well. Because of previous Westerner paradigms, adopted even by Chinese, the concept was misinterpreted as "doing nothing," nihilism or anarchy.

Actually, it is an invitation to follow in the process of knowledge or action for the "Dao" (universal law of evolution) or might be "De" (the joint of natural evolution with society goals). We shouldn't interfere too much. In American could be translated as "Let it be!" For education, it means less interference as we can with the object of inquiry, if we are researcher or avoid interfering too much with personality of trainee/ student/ child in order to improve his /her creativity. It means to act accordingly, to find opportunity, to avoid the force, do not disturb, to preserve feelings, to help, to cultivate self-control, to act effortless and with much joy. It means to teach student not what we think he needs, but what he chose to learn; to discover the uniqueness of every person. Nowadays, partially we find all this in our schools. It means the paradigm is working. Nevertheless, economic, politic shouldn't impose to education, to people too many regulations, standards, but help people to evolve and create any form of economy, arts, science etc. Wuwei was interpreted also as the French "lesser faire" or liberalism. This concept has also ecological meaning in relation with nature and causality of events.

Wuwei could be much better translated as inner evolution which must not be disturbed by any possible external wrong force. The Path, the Way is always natural, always changing and in Chinese culture became a philosophical concept. If we possible reverse our views, assumption, perception, stereotypes, might be revealed also the profound meaning of Way; in practice the Way for research, might be used fewer hypotheses and more observation, less theories, but more experiential knowledge. The absorption of old Chinese wisdom could be profitable to change the paradigm, the way of thinking.

Paradigms were shifting from Cartesians vision to Relativism and now to Daoism, even we are aware or not. The assumptions that economical and political systems are overpower and influence the educational system doesn't work anymore. And also we should notice that Globalization doesn't mean only transfer knowledge from one culture to another, might be interchanging and deep reflection.

New perspective, that already take over place here and there, we can call the Way paradigm (might be another name, but sure we can recognize so many similarities with this old wisdom). Could be named Dao of research this attitude or Dao of teaching which is using mixed knowledge, composed, complex and sometimes wired. We started to respect culture identity, person, and alternative paths, the particular and contextual frame. There are already a lot studies with ethno-anthropologic dimension, in neurosciences for understand cognition, private alternative schools and house

schooling that we couldn't mention here. All are caused by assuming new believes, philosophical point of view, liberation of mind.

6. Conclusion

We haven't been focused in this approach in any particular paradigm and this brief overview was more philosophical one then analytic or sociologic. In order to be specific, of course, we need particular description and study-case. However paradigms are not predictable; they just came and are fruitful or not, successful, supportive or disastrous. They couldn't be characterized as true or falls, nobody can tell for sure his outcomes. Paradigms are working at deep level, sometimes unconscious as tacit knowledge and couldn't be rationalized so easy. They start in our mind as assumption and orient us. The change of perception is all we need and we can do this by experiencing, encountering new facts.

Awareness of the deep levels of values is strongly recommended for any researcher or teacher before any explanation or judgement. The Dao philosophy is an invitation for educationists to support new generation's Way.

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A pilot study of time management behavior scale with background questions amongst university

Edmond Sebestyén^{a*}

^aScience of Education, University of Szeged, Szeged H-6722, Hungary

Abstract

Due to the accelerated flow of information, development and the constant change of needed knowledge idiosyncratic to the XXI. century. In an academic environment, this puts an emphasis on disposition of usable time.

Questions came up: Will the factors remain in a different cultural environment? Does the time management affect the academic performance? To answer said questions we put together an empiric study consisting of two scales: 1) an adapted version of the Time Management Behavior scale (Macan, 1994) and 2) a background scale measuring the background data of the students. This scale is still being used in the international studies. The adaptation's validation is proved by a pilot study. University students were participated in this research (N=56).

According to the initial studies four factors were labeled as Factor 1 – setting goals and priorities. Factor 2 – mechanics, Factor 3 – perceived control of time, Factor 4 – preference for organization. In our study we defined 4 factors as well. Factor 1, 3, 4 remained and Factor 2 – mechanics and implementing has changed. The Kaiser-Meyer-Olkinindex (KMO) is 0,65 and the factors accounted for 53% of the common variance. The Cronbach alpha is 0,77. We have found positive correlation between perceived control of time and satisfaction with achieved grade point average ($r=0,41$ $p=0,01$). Furthermore, men were found to positive correlation between preference for organization and CGPA ($r=0,79$ $p=0,01$).

Regarding to the low number of participants and the results we certainly state a larger number of participants may cause more valid outcomes.

Keywords: time management; TMB; academic performance; pilot study.

1. Introduction

The exact reason for choosing the topic of this study was to find an up-to-date answer to the challenges of the fast-moving world. The lack of time is one of the most prominent problems of modern society. Duties of working and visiting school take up substantial amount of time. As a consequence, there is no more option than to divide the time after work/school time or before going to sleep. This is the period when one can do sports, manage the household issues, do the homework / care about the children, maintain social connections and engage in hobbies. These emerging activities demand that we have a system (self-regulating components) to divide it. The literature labels this issue with the terminology of time management, which is used by several disciplines. It occurs in the field of organizational development or supporting pedagogical work, the experts who deal with the specific field can provide help in this question. The question of time management has been in the spotlight for long time. This field emphasizes the division of the daily and weekly tasks. The planning, the regulation and the control also appear in this field. It is an evident question that during the modification of the given behavior, what extent and type of time management activity one requires. Mapping the possible relationships can help the expansion of the field.

* Corresponding author. Tel.: +36-20-466-4711
E-mail address: edmond.sebestyen@gmail.com

There is no unanimously accepted definition for time management and neither the skills and behaviors that this notion contains. The preferred definition that we use is the following (Claessens et al., 2005. 262.p.): " behaviors that aim at achieving an effective use of time while performing certain goal-directed activities." This definition is remarkable in a sense that the usage of time is not defined as a goal and it is also used as an active activity, where the focus is on the goal oriented activity itself. The term is highly complex and in this theoretical introduction it is not taken as a guideline. (Claessens et al, 2005)It is also well-known that researchers view the question of time management in different ways. Studies focus on the topic from different aspects and they also transformed the theory of time management in order to fit their field (Macan et al., 1990; Eilam and Aharon, 2003). The Time Management Behavior Scale (TMB) that we adapt (Macan et al., 1990) consists four models:

- 1) Setting goals and prioritization
- 2) Mechanics of time management
- 3) Preference of organization
- 4) Perceived Control of Time

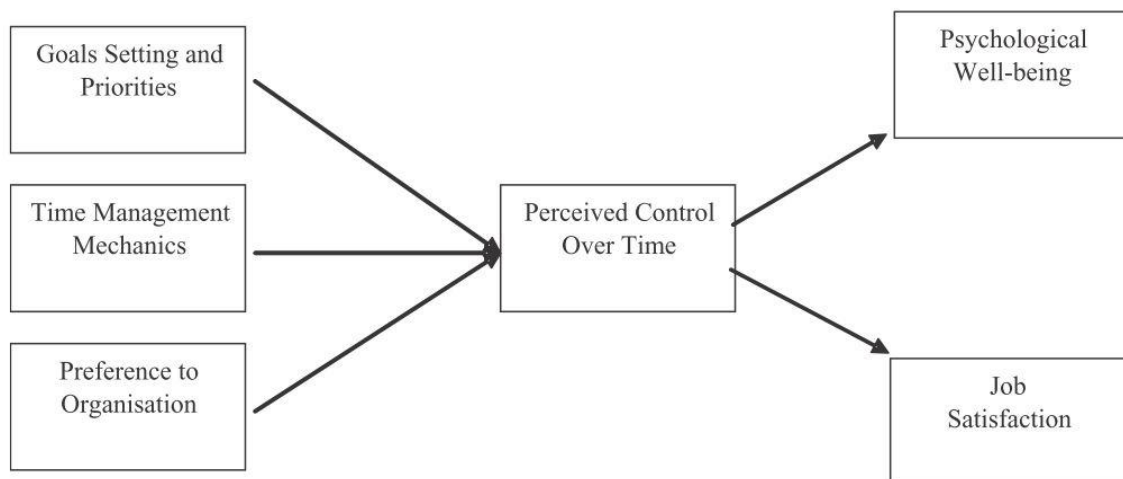


Figure 1. Proposed testing model based on Macan's (1994) study

According to the assumptions these elements (1-4.) appear as individual terms. On the other hand, based on the implemented analyses, the first 3 elements result in the fourth one. The Perceived Control of Time can be understood with the other three points together. It can also be stated that preferring setting goals, prioritization, and use of the Mechanics of time management and organization means raised feeling of control over time, which makes school activities more efficient.

The connection between time management and academic performance.

The relationship of time management and learning effectiveness have been analysed by several studies (see Claessens et al, 2005). Based on these researches, it can be stated that there is a strong correlation between academic performance and the time management behaviour (Ngozi et al., 2006). With the increased level of self-efficiency, academic performance level raises as well. Self-efficiency is a belief in connection with a certain competency that is connected to the steps of self-regulation by choosing the goals or the proper strategy (Schunk, 2005). Cumulative grade point average (CGPA) is used as the measure of learning efficiency, which is used as a terminology in the literature (Ngozi, Chiekezie and Ikon, 2016; Karim and Mitra, 2011). In the current research, we attempt to compare the time management with cumulative grade point average and some other variables.

2. Methodology

2.1. Objective

Our aim was adapt and investigate how the TMB works in different cultural environment. We extended the questionnaire with some background questions to obtain informed more within a pilot study. We hope it helps to reveal some ways into time management.

2.2. Participants

The research has been carried out in the circle of university students. When choosing the proper sample, it was an important factor that the question of self-regulation and time management directly appears at this age and that the literature used the same sample method (Macan et al, 1990). In the empirical analysis the participants were the following: BA, MA, ungraded and PhD students. The total number of participants in the online test was 56 in 2017 March.

2.3. Instrument

The Time Management Behavior Scale was developed by Macan et al(1990). Since then it has been used in several studies (see Adams and Jex, 1999;Karim and Mitra, 2011) and typically tested in workplace and academic environment. The Time Management Behavior Scale was tested by time, since it became one of the most typically used instrument measuring time management behavior. When choosing the proper tool, the place of usage – academic environment- was also taken into consideration. The questionnaire contains 33 items, which measures the beliefs and experiences of participants in a five-point Likert-type scale (1 seldom true, 5 very often true. Besides we have 10 more background questions. We extended the name of the questionnaire with “H” (Hungarian) to separate the Hungarian version from the original version (TMB-H).

2.4. Procedure

The analysed sample was sorted by probability sampling and independent selection after establishing contact with the university's institutions. Students were instructed to read a brief instruction about the questionnaire and the completed by self-reported method.

2.5. Data analysis

In this research Pearson Correlation, factor analysis and reliability sampling were used to obtain information needed and to correlate the relationships between the variables.

3. Results

The Time Management Behavior Scale has not yet been tested in Hungarian environment, this is the why pilot study was necessary after the adaptation process (N=56). The table 1. show the results of the above mentioned test.

Table 1. Gender distribution of students considering age and faculty

	number of people	age mean	FM ^a	FA ^b	FEBA ^c	FP ^d	JGYFE ^e	FSI ^f
Male	17	22,59	0	7	1	1	2	6
Female	39	22,08	3	11	1	6	1	17

Total	56	22,34	3	18	2	7	3	23
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^aFaculty of Medicine; ^bFaculty of Arts; ^cFaculty of Economics and Business Administration; ^dFaculty of Pharmacy; ^eJuhászGyula Faculty of Education; ^fFaculty of Science and Informatics

It is visible that the number of female participants is double as much as the male participant. Those who completed the questionnaire study in the two most populous faculties. The distribution according to the level of BA/BsC is 23, MA/MsC 16, ungraded 13, PhD 4. The table also shows that participants mainly study in BA/ BsC and the amount of Ma/MsC participants and the ungraded participants is more significant compared to the others. In the factor analysis and reliability calculation it can be stated that some items have weak values, which can be due to the sensitiveness of the sample number of the statistical analysis. The instrument has been modified by additional questions.

The result showed definite item correlation. In the latter, there was more evident item item correlation. Based on the communalities and rotated factor matrix, 2 items were deleted from the questionnaire, since those statements had too low values (<0,2). The explanation might be the ambiguous / not proper wording. The Time Management Behavior Scale value is proper (0,86 Chi-square=3541,55 DF=465 p=0,01). This way the items were proved to be part of the given factors. The explained variance is 45% with 4 components, which is under the limit value. The validity of the factors ought to be handled carefully. In table 2. the reliability indicators are shown compared to the original factor structure and reliability.

Table 2. The factor structure of the adapted TMB

Number of factors	Name of factors	Original*		Modified**	
		Itemnumber	Cronbach α	Itemnumber	Cronbach α
1.	Setting goals and prioritization	10	0,68	13	0,83
2.	Mechanics	10	0,83	7	0,65
3.	Preference of organization	8	0,69	5	0,80
4.	Control felt over time	5	0,62	6	0,51
	Total	33	0,83	31	0,71

*Macan et al., (1990); **2 statements have been deleted.

The analysis and correlation of the variables are described in the following. Based on table 3. the factors show average strength of significance, which is not the same as the original factor structure.

Table 3. The correlation matrix of TMB-H

Factors of TMB-H	1)	2)	3)	4)
Setting goals and prioritization	1	0,452 **	- 0,155**	- 0,230**
Mechanics and realization	0,452**	1	n.s.	n.s.
Preference of organization	- 0,155**	n.s.	1	0,313*
Control felt over time	- 0,230**	n.s.	0,313* *	1

Note: **p<0,01

The correlation matrix shows different level of significance, which is different from the original factor structure. There is no significant connection between the Perceived

Control of Time (4) and all the other factors. There is a stronger connection between 1) Setting goals and prioritization and Mechanics and Implementation (2). The Setting goals and prioritization factor shows significant relationship with all the other factors. The weakest link is between factor number 1 and factor number 3. The goal oriented actions might not count as the organization of the environment.

When Grade Point Average is analyzed in connection with time management, it can be determined that the amount of Perceived Control of Time show strong positive correlation with school performance ($r=0,585$ $p<0,01$). This finding confirms the results of the the international literature (see Karim and Mitra, 2011).

The learning outcome is in significant correlation with satisfaction with performance ($r=0,748$, $p<0,01$), and the compassion towards faculty ($r=0,410$ $p<0,05$), and the level of study ($-0,409$ $p<0,01$). Naturally, the negative correlation can be detected towards unfinished courses ($r=-0,409$ $p<0,01$). The compassion towards faculty and the completed courses are in connection with the satisfaction with performance and learning outcome as well. The literature (see Karim and Mitra, 2011) emphasizes that the Perceived Control of Time (and the time management behaviour) shows positive correlation. The sub-scale explains the total variance in 39,7%p.

The distribution of mean in terms of gender is the following. There is no significant difference between genders in terms of means ($t=-1,847$ $p=0,074$). It also explains the distribution of the father's and the mother's qualification in the sample. The results show that the distribution of qualifications does not reveal any further information (Chi-square=71,949 $p<0,01$). Additionally, there is also a connection with uncompleted courses ($r=-0,151$ $p<0,05$). In this way, if one likes the faculty, it is more likely that one does not have any uncompleted courses. The adapted questionnaire showed different features academic environment, since the items' position altered in the factor structure compared to the original research. Two items were also deleted, since the values did not reach the expected minimum. During the analyses the reliability value was around the accepted level, which gives reasons for positive thinking and also for carefulness towards it. It was a successful attempt to show correlation among the factors of TMB-H. The setting goals and prioritization sub-scale is outstanding compared to the other sub-scales, since it show a strong relationship with Mechanics and implementation and Perceived Control of Time sub-scale. In terms of organization preference sub-scale it is not shown. The outcome was unchanged compared to the literature (Macan et al., 1990; Karim and Mitra, 2011). It is possible to conclude that the adapted questionnaire functions well in domestic sample and the relationship between time management and school performance, which is noted by literature, is verified.

4. Discussions

The theoretical background has certain ambiguities, which resulted in the low synthesis of the literature. Several studied have been carried out in this field, only a few studies dealt with the short-term and the long-term planning. The studies did not cover the affective elements (such as motivation). From methodological point only self-assessment questionnaire was used in this question, which determined the outcome of this study as well. Furthermore, the cognitive aspects have not been issued, nor the differences between personal characteristics, attitudes, socio-economic status, which can act as an influential factor. After testing the instrument in Hungarian environment, the correlation between the time management behavior and Perceived Control of Time can be verified. It is also in correlation with academic achievements. As it is a highly significant field, pedagogical researches might base on it. The relevance of this topic in connection with learning is not questionable, although the approach is rather that. It is of utmost importance to review the potential connection points of these fields and the exact relationship between academic achievements and time management.

On the other hand, the time perception is affected by time management behavior. Setting goals and prioritization has also strong correlation with time perception. The Mechanics and Implementation sub-scale does not show significant connection. This

result is different from those that Macan et al., (1990) received, since the three time management behaviour sub-scale (in different level) showed correlation with Perceived Control of Time sub-scale. The limitation of this study is the sample-size regarding to pilot study. The basic idea, which says that these sub-scales affect time-perception sub-scale, is confirmed.



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The role of humour concerning the learning activity – an exploratory study

Călin Răzvan-Alexandru^a, Bîrsănescu Irina-Alexandra^{b*}

^aSenior Lecturer, PhD, Teacher Training Department, University of Craiova, Romania

^bStudent, Faculty of Letters, University of Craiova, Romania

Abstract

Regarding the manner a learning activity barges in, one significant element is treated with not enough attention – humor. To make yourself enjoyable in correlation with the ones attending your performance implies a lot more than just appearance and knowledge. An unambiguous sense of humor can help you catch all the attention and interest you seek, within the realm of possibility. Although alluding to this subject may seem infinitesimal or frivolous, in reality, the presence of humor in the vast repertoire of values a teacher should acquire represents an asset, a way to come up with something innovative, an optimization, an update. Adding a nuance of playfulness in the learning process implies profound psychological characteristics (from inherent capacities to gained ones) which need to be studied in detail. This exploratory study aims to follow the impact that humor's presence has on one's performance during the formal context of a learning activity.

Authors' exploratory advancement, this study merges both the perception of professors and students, accordingly to the desirable demeanor of the aforementioned – professors – generating relaxing training frameworks based in humor. An evaluation where P.C. Smith's and L.M. Kendall's behaviorally anchored rating scales (BARS) were used (starting from J.C. Flanagan's critical incident technique), while using short explanations represented by adjectives, verbs or short descriptions, results in a quantifiable clarification of key performance dimensions for a certain type of modern teaching activity.

Keywords: humor, education, training

1. Introduction

Once addressed a question concerning the ideal template of a professor, the majority of nowadays' youngsters responds easily confused. Oftentimes, they cannot find their courage or inspiration to come up with and emphasize individual missing points which could be conveniently surmounted, pleasing both sides. Moving to a more familiar background, we can consider that the youth, being participant to the teaching activity, wishes to break the boundless wall built between student and professor, wall that evidently obstructs any kind of interaction outside the prospective subject limitation, but also influencing the student in a negative direction, taking away the opportunity to feel like taking part of the actual communication process.

Mentioning the presence of a communication scheme, we can dig deeper into understanding and assimilating different influential factors which drift upon the process itself, in an educational context. One of the main purposes of this study is represented by humour, element defined as a universal mean of communication and social imprint which holds a variety of functions (Martin, 2010, p.5). Humour presents the image of an instrument which makes possible demolishing that former wall we were talking about, once using it properly, keeping in mind its well-contoured criteria and finite area. In another work of his, Martin brings up some of the effects humour has not only physically, but psychically, implying specialised experiments which can prove everything he stated and also, he lists paramount roles humour has

* Corresponding author.

Tel. +04-0768-259-777; E-mail address: calinrazvanalexandru@yahoo.com

Tel. +04-0784-231-423; E-mail address: irinabirsanescu@gmail.com

(once exposed to a subject) as a diminishing stress factor and analgesic. Although his theory is quite solid, Martin's work can't bring completely valid and pure arguments, reason for the remaining free space for subjectivity and an urge for superposed research (Martin, 2001).

Implications of humour in our everyday life are numerous, but much more relevant would be the use of humour in the teaching activity, process which requires substantial knowledge of the human being generally, along with really understanding the undergrounds of pedagogy. As an active part of the teaching system, humour – used where and when needed – can contribute to boosting morale, combat blue moods, set in the right ambience for teaching and also entertain. Anyhow, things can get easily out of control, justification for the need to designate boundaries of using humour as a teaching practice. On the one hand, there can be noticed adaptive-positive feedback which is definitely directed to progress, while on the other hand there can be detrimentally noticed maladaptive-negative feedback which can appear the exact moment when humour is forced in or incorrectly used. These are two contrasting dichotomy situations that result in a calamitous inconsistency (Kuiper et al., 2004).

But whichever are the limits of using humour in the teaching activity as identified by specialised literature? Humour used erroneously in the context of training can be scattered into several formalized segments after Wanzer: student-oriented deprecating humour, offensive humour, self-oriented deprecating humour (Wanzer, 1999). Getting humour reach out of hand is directly altered by words as given and by out-breaking the edges of possible creative combinations, resulting in nuances that are socially unacceptable (racism, ethnic and moral issues) which are questionable, eventually causing repercussion towards the teaching activity, or worse, the teacher him/herself. This can lead to distaste and, in the long run, avoiding attending that exact situational context i.e. the course. (Tatum, 1999).

As mentioned before, there are two preeminent segments of reaction for using humour: adaptive and maladaptive. To summarise their characteristics, adaptive humour is used in facilitating coping with stressful situations of everyday routine (coping humour), as a factor of cohesion collectively in a social group (affiliative humour), for self-emphasis without stirring other people's opinions (self-enhancing humour) or for the mainstream trigger of amusement in social situations (skilled humour).

Furthermore, maladaptive humour refers to deriding and depreciating oneself in an exaggerate manner (generating a distorted image of oneself, with major repercussions in the everyday life and any kind of performance field – self-defeating humour), to failing using humour as a strategy, eventually underrating one's own abilities and potential (usually people use this kind of humour just for the sake of others – belaboured humour), to antisocial humour which targets disparaging and intentionally hurting people around oneself (aggressive humour) or even cruel humour, irrational humour which often gets beyond any kind of borderline of decency (rude humour). Seemingly, using one type of humour or another has serious consequences in relation to personality, both transmitter's and receiver's (Kuiper, 2004).

Hence, it is observable that humour can have devastating side-effects while used without reason or with adverse intentions. Racist jokes, looks-based jokes, human typology jokes and so on can affect interlocutors as much as positive humour does towards progress.

2. Methodology

2.1. Objective

This exploratory study aims to contour the exact fine line between the normative use and the regressive use of humour, accentuating the positive segment of its utilization, providing that the key-apparatus in moulding students is securely held by teachers, in the palm of their hands.

Additionally, we intend to offer mentors/teachers an inventory of desirable behaviour elements, circumscribed to the actual sense of humour, useful in the training activity itself and also, in the context of an ultimate self-instruction build-up.

2.2. Participants

168 students (92 male and 76 female), members of the Craiova University, final year, agreed to participate to this study. Their age vary between 21 and 29 years, with an average of 21.8 years.

Successively, 10 teachers, members of the same University served as the group of experts who contributed to the completion of highlighting and describing social behaviour related to mentors' sense of humour.

2.3. Instrument and procedure

This exploratory research had as a main basis an investigative demarche, based on The Critical Incident Technique of J.C. Flanagan (1954), mixed with P.C. Smith's and L.M. Kendall's behaviourally anchored rating scales (1963), obtaining an inventory of desirable behaviours circumscribed to the teachers' sense of humour, organized and prioritized in terms of importance perceived by their direct beneficiaries – students – being designated as a result.

Initially, the 168 students were asked to develop a list with a number of minimum 10 professors they did consider the most humorous during the 3-4 years of studying they experienced. They were also asked to rank them from the lowest to the highest mark. After that, the students were supposed to leave out 5 of the 10 possible choices, respectively the ones that didn't have such a big academic impact than the others.

The lists were reunited and the first 10 professors' names whose mentioning frequency was the highest were grouped. This group became the expert group which will be later consulted, during the research, with the purpose of removing prospective evaluation mistakes.

There are four steps in our exploratory demarche.

Step I: The students were asked to make up a list describing the behaviours of the professors which generated well-being, laughter or impressive reactions amongst other students in their opinion.

These lists containing description of humorous behaviours were centralized, reunited and kept in a unique list which combined the first 10 names with the highest mentioning frequency. The chosen dimensions were collated, the redundant, frivolous or trivial information was removed, the resulting list being once again subject of a debate where explanatory definitions were needed for each dimension (the duration of action varied between thirty and sixty minutes).

Step II: The list of dimensions, along with their definitions was shared with the expert group, with an additional request to reflect and give examples of the respective referent. After collecting the examples, they were synthesized into one unique list, removing redundant information once again.

Step III: Another group of 30 experts was called into a meeting. The experts were given a list with dimensions and definitions and another with examples from the preceding step, aleatory. The task of this group was distributing each example to its dimension. This operation is called qualitative point of view. The examples which cannot be distributed to their dimension represent ambiguous anchors, so they won't be used, therefore they will be eliminated.

Only the items (examples) whose relocation frequency was beyond 67% were kept. Also, any dimension with less than 60% example allocation was eliminated.

Step IV: From the final list, students were asked to choose the first 7 form conditions they considered paramount for a teacher to possess in order for him/her to present positive humour and successful student-teacher relationships.

Moreover, we ought to mention the fact that only those behaviours (related to the sense of humour), with a percentage of 10% or more, were being kept out of the given opinions.

3. Results and discussion

Table 1. The inventory of desirable behaviour related to mentors' sense of humour

Behaviour Description	Opinion percentage (%)	Range
Colloquial expression	75	1
Self-irony	54	2
Vocal impressions of popular comic characters	51	3
Wordplay	41	4
Funny Stories	34	5
Nonverbally suggestive behaviour	22	6
Exaggeration	13	7

These results obtained through our study speak for themselves (Table 1). Depicting, correlating and blending them in with our antecedent mentioned information regarding the study's investigative approach allow some closure.

Our study is definitely not a broad one. It does contain a pinch of personalism, imminent in any research that has to do with different subject opinions. In fact, the results retrieved analyse and make clear all information gathered by various studies respecting using humour in the teaching activity.

The identified desirable behaviours can be ranked in the context of different classifications of humour forms (Kuiper, 2004, Martin, 2001, 2010). The entire purpose of this piece of work was determining these behaviours, as a first step in the direction of developing a formative strategy specific to each and every one of them, dedicated to training mentors.

Regardless the fact that we agree to Forabosco (1992), who states that subjectivism is the determinant which makes humour being perceived dissimilarly, our study result show the fact that it is possible to mention a consensus regarding the foremost behaviours which include positive humour used in training.

The first three behaviours identified subsume to a spontaneous strategy used by pedagogues when a stress-relief is needed, the moment when attention is lost or feedback becomes indistinct. Moreover, the behaviour that designates the so-called "colloquial expression" it does not assert anything more than just the fact that youngsters nowadays wish that their professors would speak to them accordingly to their needs, to their age, eventually managing to understand and – what is more – to solve their exact problems.

Placing a concept as self-irony as a second point in our discussion makes us wonder and question ourselves: are they enough professors capable of self-irony without risking to fall into an endless pit of ridicule, mockery and embarrassment?; are they able to be self-ironic and yet maintain their self-esteem constantly high at the same time, being truthfully respected at their fair value of saying and doing?

We can bring down the curtain by acknowledging the fact that we do consider beneficent an activity regarded as formative and pointed in the direction of professors, of certain behaviours. This said, we can only recommend role-playing as an efficient way to be used as to the entire teaching process (Călin, 2010).

Utilising any of these behaviours has as an outcome the implication of an appropriate environment, the connection created between teacher and student while using humour (gathering enthusiasm, positivism, optimism, well-being etc.).

The exact purpose of any training approach is not the actual delivery of the information itself, but achieving these formative objectives we should keep in mind. Schooling – with every small thing it implies – belongs to students, and not to teachers, trainers or mentors. In this context, any adapting attempt of the educational process to the psycho-social characteristics is not, by any means, too much.

Professors are often faced to a constant competition held between the inducement, stimulus, interactivity of technology and the conventional ways of doing things,

taking into account the fact that Marc Prensky's concept of "Digital Natives" includes the extensive majority of young people (2001).

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Education, the unconscious and the manifestations of human behaviour

Gabriel Albu *

Petroleum Gas University of Ploiesti, Bd. Bucuresti, nr. 39, Ploiesti, Prahova, Romania

Abstract

Without underestimating the acknowledged significance and role of consciousness in our lives, relationships and education, for a specialist in education science it is worth researching as well into the significance and role of the unconscious in the manifestations of human behaviour. The study aims to capture and present some of the main behavioural manifestations in which the presence of the unconscious, of the subliminal and implicit processes is undeniable. Presented by teachers to new generations, and properly understood by them, they may help them become less vulnerable to the subtle/ veiled forms of manipulation of their choices, options and decisions.

Keywords: cognitive unconscious; motivational unconscious; emotional unconscious; education; human behaviour.

1. Introduction

Our great majority (usually) believes that the human being is by its very definition a fully conscious being, and - from this point of view - we (almost) never doubt that things could otherwise be different. We do not accept (or could not accept) the fact that we may have unconscious tendencies, reactions, attitudes and/ or behaviours.

Dominated (and lead) by this belief, we think that our choices, options, decisions, ideas, motivations, and emotions have a conscious ground - and that it cannot be otherwise. We (always) manifest ourselves, we talk to ourselves, knowingly (and, implicitly, we know what we do and what we want).

Captive in such (tacit and accepted) convictions, we do not take into account - in our analyses, reflections, explanations, interpretations, justifications and queries - the unconscious dimension of what we perceive, feel, think and do.

Whether we know it or not, whether we are worried or not, are - and perhaps more than ever - exposed (permanently and intentionally) throughout life to phenomena and strategies that focus on the unconscious, on the subliminal, seeking to influence it, and by influencing it to guide our choices, decisions, emotions, needs, purchases, relationships (with ourselves and with our fellow humans), life in general. It is, in particular, about economic-financial-banking interests, which urge the research into and the manipulation of unconscious structures; and, through them, of our motives and affective-motivational states (Fromm, 2013; Anders, 2014, 2016).

We are, I'd say, at an existential, axiological, cognitive crossroads, in which the claims over the unconscious become as important as they are urgent. The stake for its conquest grows higher, and the dispute over its use (and control), more and more fierce.

In this context, it is - perhaps - the time that, when handling, knowing, growing and shaping new generations, to take into account such realities (along with their tendencies) to help them cope with, and not be controlled by it, and - this way - be able to co-ordinate (as much as possible) - in a very knowledgeable way - their life, interpersonal relationships, self-education, self-actualization.

* Gabriel Albu. Tel.: 0723228415;
E-mail address: gabrielalbu04@yahoo.com

Therefore, without underestimating the acknowledged and the undeniable significance and role played by consciousness in our existence (personal and relational-institutional), we consider it a priority for a education scientist to investigate (with utmost care and honesty) the significance, share and role of the unconscious in the formation and manifestation of motivations, emotions, attitudes and human behaviours, in the risks people expose to in losing their personal value and control over their own lives (yet living with the *illusion* of their possession) (Baumeister, 2011).

2. Defining the key concepts

In defining the concepts (closely) related to the present research, we will refer to the psychoanalytic and cognitive approaches.

A. *Psychoanalytic approach*

It is already well-known that the one who has dealt systematically with his unconscious life was the famous psychiatrist S. Freud. He was a pioneer in the field; he has made popular the idea of the unconscious, claiming that it is “a part of the mind that defines and explains the mechanisms beyond our ability to think and to know” (Psihologie. Idei fundamentale, 2015, p. 94). During his research, Freud comes to the conclusion that “the active state of consciousness - that is, the operational mind that we are directly aware of in our daily experiences - is just a fraction of the totality of the psychological forces at work in our psychic reality. Consciousness exists at the superficial level, to which we have easy and immediate access” (idem, p. 95). Beyond the conscious part of our life, however, are “the strong dimensions of the unconscious, the storehouse from which our cognitive state and active behaviour are operated” (ibidem).

The father of psychoanalysis introduces into the language of psychology the concept of psychic apparatus. It consists of the following (superposed) systems (Freud, 1990a, 1990b):

a. *The unconscious system*

In the view of S. Freud, the unconscious contains impulses, dynamic elements; energy and instincts, innate needs (among which the most significantly expressed are sexual necessities). Its contents are not affected by the evolutionary changes of the individual, by the passage of time, by his ridiculous acquisitions or by contextual variety.

When ideas, memories, or impulses are too overwhelming or inadequate (in relation to social norms and values), they are suppressed and stored in the unconscious alongside our instinctual impulses. It - the unconscious - silently guides the thoughts and behaviour of the individual. The difference between our conscious thoughts and the exhortations of the unconscious generates psychological tension (Psihologie. Idei fundamentale, 2015). The purpose of all efforts is to reduce system tension (respectively instinct gratification). Removing tension is reassuring.

The unconscious works according to the pleasure principle, to which Freud grants the status of fundamental life principle. It is true, however, that the founder of psychoanalysis states that the unconscious also contains not only the pulse of life, but also the opposite, the impulse of death that is present from birth. This impulse is self-destructive and “pushes us forward, though, in this way, we are getting closer to our own death” (idem, p. 96). S. Freud argues that, in fact, the unconscious encompasses many conflicting forces. In addition to the impulse of life and death, it also contains the intensity of suppressed emotions and memories, as well as “the inherent contradictions of the ways in which we view conscious reality, alongside suppressed reality” (idem, p. 97).

b. *The preconscious system*

Memories that are not part of our daily memory storehouse, but are not repressed either, lie in a part of the conscious mind that S. Freud called the preconscious. This intermediary organism between the unconscious and the conscious brings together the information that is available to the individual, but which is - temporarily - absent from

the realm of consciousness. Its contents may become conscious if the person (concerned) makes an effort to do so.

c. *The conscious system*

This system brings together the entire introspective-accessible knowledge of the individual at a given time. It observes and allows the impulses of the unconscious to be satisfied or not. Consciousness has the role of a censor - in the opinion of the famous psychoanalyst: it censures those impulses that do not conform to social values and norms, that form the basis of human cohabitation and it functions according to the principle of reality. Consciousness is characterized by reflexiveness, discernment, organization of actions, anticipation of the consequences of our acts/ deeds.

B. *The cognitivist approach*

The cognitive conceptions on the unconscious derive from the notion of parallel processing (Opre, 2012). This implies the fact that our mind is compelled to process a lot of information at the same time. Under such circumstances, we have to accept that these processes cannot be all conscious. Moreover, it seems that most of them are in fact unconscious (idem, p. 32).

In principle, specialists in this domain of psychology believe that (Opre, 2012):

a. *Conscious processes*: are running serially; are dependent and interactive; are slow; involve effort; involve conscious control; have long-term retention; are attentional; are flexible; are easily modifiable (in relation to individual's evolution and the specifics of external/ surrounding contexts).

b. *Unconscious processes* (automated): are running in parallel; are modular: are independently operated; are rapid; claim minimal effort; involve little to no awareness; have short-term retention; are non-attentional; are difficult to modify (during individual's evolution and in relation to the specifics of life contexts).

From a cognitivist point of view, the unconscious is: (a) out of the field of attention or of what is attentionally controlled and manifested. In this sense, "a person is unaware of an external stimulation if the stimuli acting on it cannot penetrate the 'field' of attention" (Opre, 2012, p. 42); (b) that which is introspectively inaccessible. Thus, a person is unaware of the occurrence, causes or other attributes of an event or action if that person "is unable to validly report these dimensions" (ibidem).

Unconscious mental activity is labelled by cognitive psychologists as implicit; it is also called the cognitive unconscious (Opre, 2012). According to them, the processes of cognitive unconscious include: implicit perception; default memory; implicit learning; implicit thinking.

Implicit perception

This process refers to "any effect of a sensory stimulation event on a person's experience, thought, or action, as long as he/ she is unaware of the presence of the event" (idem, p. 44). It includes: subliminal perception, parafoveal perception, perceptual defence, selective attention, hypnotic alterations of perception

Implicit memory

Unlike explicit memory circumscribed to situations where solving a mnemonic task requires a conscious-intentional updating of past experiences and is triggered when people try to deliberately remember events that occurred in the past, implicit memory refers to "manifestations of memory which occur in the absence of the subject's intention to remember" (McDermott, 2000, apud Opre, 2012, p. 65). It considers all the post-effects of stimuli that do not involve explicit or conscious updates (Roediger, 2003, apud ibidem). This process brings together a set of unconscious phenomena such as: repetitive priming, memory of motor and cognitive skills, memory of conditioned reflexes, sensory-motor memory, biological memories, etc. (idem, p. 67).

Implicit learning

Specialists have found that there are innumerable situations in which we learn to respond adaptively to environmental demands without being aware of the rules governing these behaviours (idem, p. 83). According to A.S. Reber (1989, apud idem, p. 84), implicit learning is "an unconscious process of acquiring abstract knowledge." Knowledge acquired through implicit learning is not completely accessible to consciousness. Their organization is much more complex than the mere association between stimuli. Also, the relationships established between implicitly acquired

knowledge cannot be identified by inferential strategies guided by conscious processing (idem, p. 84). In short, implicit learning is learning that unfolds without the intention of learning (idem, p. 85).

Implicit thinking

Many of the processes of thinking are done “without consuming attentional resources” (idem, p. 95). Implicit thinking “operates outside consciousness” (ibidem). It can be the basis of “the phenomena of intuition, incubation and insight in the problem-solving process” (idem, p. 96). In this process-cognitive area, intuitions represent “those ‘good presentiments’ which indicate what is correct or that we are right without knowing why (without being able to formulate an argument, a reason and without invoking a precedent)” (ibidem).

In addition to these predominantly cognitive psychological processes, the human being also has:

Motivational unconscious

As we can have an intrinsic and an extrinsic motivation, a promoter and a preventive one (Grant-Halverson, Higgins, 2014), we can also have explicit and implicit motivation.

- Explicit motivation is the conscious representation of a conative state or the desire to get involved into an activity, as they are expressed (for example) in appetite, desire to be loved, thirst for knowledge, for beauty, for self-achievement. The individual is aware of their motivations, can reflect upon them, they are investigative-accessible, self-attributed (idem, p. 103).

- Implicit motivation refers to changes in the individual’s experience, thinking and/ or actions than can be attributed to his or her motivation, independent of his/ her ability to become aware of that state (idem, p. 102). The individual can deduce the implicit motivations from personal performance as a result of his/ her involvement (in a given/ specific task)

If the explicit motivational system is accessible to awareness, the implicit one is not; however, it can unconsciously influence the individual's experience, thinking, and actions. In the context of implicit motivations, “people engage in goal-oriented behaviours without being aware of their motivations or goals” (idem, p. 103).

Emotional unconscious

Human beings have:

- explicit emotional states; these are acknowledged affective states (such as: fear, joy, sadness etc.);

- implicit emotional states; they envision those changes in the emotional state of which the subject is unaware.

Under these circumstances, emotions can be (just like perception, memory, learning, thinking, motivation) inaccessible to the state of consciousness. Implicit emotion refers to “any change in personal experience, thinking or action that can be attributed to an emotional state without being aware of that emotional state or independent of it” (idem, p. 105). Therefore, changes in the emotional state can occur, even if the subject is unaware of this change (idem, p. 107). We are talking in this case, for example, about a certain state of anxiety, phobias, etc.

The most credible testimony to the existence of unconscious/ implicit emotions comes from the research on implicit attitude. Like emotions, attitudes are generally developed as conscious mental provisions. But there are also a number of implicit positive or negative attitudes that can affect our social cognition and, at the same time, our relational behaviour (even if we are not aware of the existence and operation of these attitudes) (ibidem).

Cognitive psychologists show that implicit emotions are a reality; for example, “under certain conditions, ‘preferential’ reactions can later influence a person's consumption behaviour without him/ her being able to become aware of the affective reaction the moment it was generated” (idem, p. 108). There are times - increasingly studied by specialists - in which the brain generates an emotional response for which the person (concerned) does not have a conscious experience.

3. Manifestations of the unconscious (in our attitudes, behaviour, and life)

We are trying to capture some manifestations of the unconscious in our lives, behaviour and attitudes.

A. *Manifesting (and satisfying instincts)*

As we know, the human being has a spiritual-cultural dimension and an animal-biological one; one relates to an individual's social-axiological existence, the other to his/ her sensory-factual one. Man has cultural needs, but - above all - he has natural needs (Baumeister, 2011). Under certain material and social conditions, he can be guided and driven by his instincts: (a) self-preservation: food, water, rest, clothing, accommodation; (b) self-defence: benign violence; (c) perpetuation of the species: reproduction; (d) protection, nursing offspring/ children, etc.

Under these circumstances, many dilemmas are born. Among the most significant, we consider the love-related dilemma: how much and how deeply it pertains to instinctual (erotic-sexual) attraction, unconscious, and how much it relates to an intentional-optional behaviour, culturally founded, and which inspires: care, responsibility, respect, devotion, sacrifice, loyalty, dedication, empathy-compassion, sincerity?

Whether or not confronted with this dilemma, some specialists/ essayists argue that it pertains rather to the tendencies and instinctual-unconscious motives, which serve as later foundation - in a more or less organic measure - for cultural behaviours. Values (be they moral, aesthetic, religious) have a derived share and regulate the love relationship according to the dynamics of instinctual desires. In short, the share of the instinctual-unconscious side is predominant in relation to the spiritual-cultural side, in triggering, running and quenching the love relationship.

Other specialists have come to the conclusion that the manifestation of love is rather related to socio-relational motivations, to the spiritual, emotional endowment, to the affective emotional depth, to the sensitivity and to the spiritual beauty of the partners. The (sexual) component has a derived weight and is controlled depending on the existing value system (in the immediate environment of the loved ones). In short, the weight of the moral-spiritual side is predominant in relation to the instinctual-unconscious (Cohen, 2014; May, 2014; Ibn Hazm al-Andalnsī, 2012; Bruckner, 2011; Malach Pines, 2011; Larchet, 2010; Verdon, 2009; Alexiev, 2007; Clément, 2006; Bataille, 2005; Bruckner, Finkelkraut, 2005; Eibl-Eibesfeldt, 1998; Paz, 1998; Keyserling, 1996).

B. *Unconscious attitudes and behaviours (unconsciously inherited from childhood)*

a. For most of us, it is well known that, while growing up, the human being (in particular, the child) adopts - unconsciously - attitudes/ behaviours by imitating the attitudes/ behaviours of those around him and with whom he spends most of his time, without him voluntarily intending this. We can invoke here: parents, brothers, cousins, children of the same age or older, grandparents, media, etc. There is, for example, the unconscious assumption of: (a) personal hygiene items (or neglect of bodily hygiene); (b) order/ disorder in one's own space (life); (c) cleanliness/ negligence; (d) verbal and/ or non-verbal language elements; (e) compliance with/ violation of rules (such as meeting and greeting, politeness etc.); (f) manifestation of protection/ violence (physical and/ or verbal, active and/ or passive); (g) assuming beliefs, stereotypes, prejudices, values/ non-values.

In this dimension of unconscious manifestation, many dilemmas are equally born. Among the most significant seems to be the formation of the personality and behaviour of young people: throughout the individual's life, in his mental and social development process, can we eliminate what he has unconsciously taken over from parents, colleagues (playmates, kindergarten, primary school, secondary school mates, etc.), brothers, grandparents, teachers, as part of the (primary) socialization process? Can those acquisitions, which later prove undesirable, outdated, inappropriate, inappropriate in relation to their own contexts and future options, be corrected?

b. Also, the human being can unconsciously take on elements, reactions, attitudes, behaviors transmitted systematically, intentionally (possibly institutionally) by

formative-educational factors (for example, through play or within a playful atmosphere). We can cite as examples: elements of literary language; written language elements; behavioral reflexes (such as: washing hands, teeth, putting toys in order); the multiplication table; traffic rules and so on.

Thus, among the (essential) dilemmas generated by such a context would be that related to accomplishing education: how much is it an act of conscious human construction and how much an act of unconscious human construction? In other words, how much does the education owe to consciousness and how much to the unconscious?

Whether or not we are school actors, most of us, as a rule, believe that the educational act is an eminently conscious act characterized by clear, precise principles, objectives and methods. Interpreting and studying this act is made with more and more refined conceptual tools. We exclude that education may also involve unconscious mechanisms (or, unconscious mechanisms above all), which distorts its approach and research. Or, there appear to be (particularly) important unconscious processes involved in human development. Furthermore, we may discover that what has been acquired and unconsciously internalized during the primary socialization stage is at least as important as what has been consciously acquired and internalized, if not even more important.

In short, it is advisable to take into account the unconscious dimensions and mechanisms of the educational act in order to form, support and assert a robust personality, healthy in body, mind and soul.

Looking more closely - and as a working hypothesis - we may notice that: (a) the unconscious processes of human development are as significant as the conscious processes; (b) what will an individual consciously take over from trainers-educators during his lifetime depends to a substantial extent on what he has unconsciously acquired (in his first years of life), and these unconscious takeovers constitute a selection and evaluation filter for subsequent formative conscious acquisitions.

C. *Manifestation of automatisms, skills and habits and/ or tics*

The human being cannot consciously control everything they do; they would probably get tired very quickly and would burn themselves out in a very short time. Throughout their life, many of their takeovers (eventually through volitional effort and attention) pass - sooner or later - into the unconscious and act/ react automatically. As an example, we can list: walking; cycling; car driving and driving behavior; handwriting; typing on a computer/ mobile phone; playing an instrument, etc. We could add: verbal tics; (involuntary) movement of the foot; cracking joints and so on.

This type of manifestation has its dilemmas as well. Among these, we note the following: can we really get rid of these automatisms, skills, habits and/ or tics? Can we forget such behaviors after a (very) long time has passed without (being forced) to practice/ activate them?

As we might suspect, there are optimistic responses that argue that it is important to have a work program with ourselves well established and the will to apply it; as there are negative responses, which consider that such attempts are doomed to failure; automatisms will accompany us all our lives (so it is very important what automatisms, skills, tics we will take/ adopt in childhood).

D. *Taking over (and internalizing) subliminal messages (particularly those launched by institutions and sales reps, marketing, advertising)*

In a hyper-consumerist society, we are exposed to subliminal techniques of influencing our choices and decisions. At stake - notes G. Anders (2016) - is "the will itself" (p. 198, pp.). In his conception, "in the age of manipulation of the masses, the assumption that each of us would have his own will is just as unwise as the assumption that each of us would 'have' his personal opinion" (p.198, pp.). In fact, the German thinker warns - "Our views and concepts of the world (and of ourselves - o.n. - G.A.) are imprinted on us"; "we are provided with them" (p.199, pp.). They "are delivered today like all the other goods" (idem, p. 278). "The ultimate goal - believes the author - consists in the voluntary abolition of the will, abulia" (idem, p. 202, pp.).

The subliminal technique contributes to this fully, as it is increasingly being practiced on a growing scale. The media and businesses advertise themselves “by repeatedly introducing the name of the brand into films (and in prime time broadcasts – o.n. - GA), but for so short a time that the eye is not capable of detecting it”, says G. Anders (2016, p. 57).

We are exposed to subliminal stimuli. They can modify not only generic behaviours, but also specific, particular behaviors (Mlodinow, 2013; Opre, 2012). Cognitive specialists/ psychologists have come to the conclusion that “both the quality and the intensity of behavioural changes are direct expressions of the level of processing subliminal stimuli” (idem, p. 133).

In G. Anders’ opinion (2014, 2016), the appeal to subliminal messages and practices is characteristic “to the contemporary state of ‘comfortable non-freedom’ that reigns in the conformist world of today. It prevents any possible action, and today that is a chance for both laziness and ignorance” (2016, p. 57). Subtly, “what is being stolen from us,” - emphasizes the German thinker, - “is precisely the feeling of being robbed - and so we are apparently free” (ibidem, s.a.).

Under such circumstances, the author of the unsettling work *The Obsolescence of Man* notes, “it is only rarely (it only needs to happen this frequently) that individuals turn into ‘conformists’ by their own decision and by their own action”; people are - more or less discreetly - made to conform. However, the illusion of freedom is maintained. “This illusion - points out G. Anders (2016) - is the greatest chance of those who are interested in the production of perfect non-freedom.” And - in the same vein - the philosopher continues: “In fact, seizing a person’s freedom goes hand in hand with the ideology of personal freedom, and the abolition of freedom is most often done in the name of freedom” (p. 206, pp.).

In short, in the hyper-consumerist society, where every person is transformed into a client, when subliminal techniques have precise functions, we live, according to G. Anders (2016), in a gentle totalitarianism. “Nothing is more pleasurable to gentle totalitarianism,” says the author, “than to leave to its victims the illusion of independence or even to provide it in advance” (idem, p. 256).

Reflecting on these veiled, but incisive circumstances, lucid and self-critical spirits awaken in front of a profound and dramatic dilemma: how many of our options, preferences and decisions depend on ourselves and how much - in fact - are they being suggested and subliminally induced to us? More precisely, in other words, how much of our own life belongs to us, to each of us? Is it just our illusion that we belong to ourselves and that we control our lives?

E. Mass phenomena

Many thinkers and researchers (Canetti, 2009, Ortega y Gasset, 2001, Le Bon, 1990) have come to the conclusion that when they are in large and very large groups - and especially in moments of intense emotional experience - humans tend to follow and to manifest (unconsciously) the behaviours, the reactions of the great majority surrounding them.

As a rule, while in the crowd, “people’s intellectual abilities and consequently their individuality are wiped out. The heterogeneous dissolves into the homogeneous and the unconscious attributes dominates”, notes the famous social psychologist G. Le Bon (1990, p. 15). At the same time, “the individual in a crowd simply acquires, due to the large numbers, the feeling of an invincible power that allows him to yield to instincts which, if isolated, would be forced to suppress” (ibidem). For the famous French scientist, “the disappearance of the conscious personality, the predominance of the unconscious personality, the orientation in the same sense, through suggestion and contagion, of the feelings and ideas, the tendency to immediately transform suggested ideas into actions”, all these are “the main characteristics of the individual in a crowd” (idem, 17).

It seems there is a multiplication of the opportunities (and pretexts) people have to form huge groups, in which they discharge many of their daily inhibitions when they weaken their conscious self-censorship and dilute their self-control, making room for unconscious personal manifestations. Among these occasions we include: concerts (outdoor, on stadiums, in parks, in huge urban plazas, in natural perimeters), parties

(on occasion of various national and/ or international holidays), sports competitions (the Olympic Games, world championships, and national leagues), and public gatherings, demonstrations (to support certain causes or to combat certain political ideas / decisions).

Thanks to social contagion (which often works like hypnosis), people adopt - in the midst of the crowd - decisions and behaviours they would not normally adopt had they been alone with their own conscience. We refer, for example, to bruising, cursing, screaming, physical aggression, throwing certain (blunt) objects, etc. There are impulses that seem to pertain to herd mentality, of the gang behaviour.

In such a social reality, we are (again) facing dilemmas such as: can we maintain and respect our personality (with its values and principles) when we are permanently and seductively exposed to the temptation to align to a model/ trend, to the preferences and priorities of the moment? Can we defy - dominated by the desire to love, to be accepted, to be recognized - the effect of our massification as unique individuals?

F. The place of the unconscious in artistic creation/ problem-solving

Many times, the unconscious manifests itself in our personal, individual life. People generally have insights (spontaneous revelations of ideas, solutions to problems that concern them). Many have moments of illumination, clarification, understanding exactly when they least expect it. Particularly and specifically, creative people go through moments of revelation, revealing ideas, themes, solutions, correlations, unprecedented searches, clarifying the subjects of artistic, scientific, philosophical, religious works.

Of course, even in this case, we are not exempt from dilemmas. Among these, we can outline the one referring to the psychic support of our creation: eventually, is the idea, theme, original solution the result of a spontaneous tendency of the unconscious, or do they still involve effort, attention, strain, tenacity, conscious preparation? To what extent can conscious participation and preparation foster the emergence of the idea, the theme, the original solution, and when do conscious participation and training inhibit, alter them (their authenticity), compromise them (their uniqueness)? How much trust can we have (if any) in the support and contribution of the unconscious in triggering and edifying creation? What contribution does it have (if any) to its value and depth? What can we do (if anything) for the unconscious to facilitate creativity? There are tensions that any creator, any trainer faces.

G. The equation of the meaning of life

Whether we admit it or not, whether we care or not, whether we are interested or not, there is among our fundamental and life-related issues the one referring to the meaning of life: Why do we live? Why must we live? What's the point of life (if any)? Why do we exist (or why do we deserve to exist)? What good is our life (if any)? What should we do with it first of all?

Faced with such disturbing challenges, people have different approaches: (a) some simply think that there is no meaning to life; (b) others think that it is not important (at all); they believe that the issue of the meaning of life is a stale issue, "literally phlogistic" (Baumeister, 2011, p. 18); for them, investigating the meaning of life "seems a sterile and useless exercise" (ibidem); (c) some believe that the issue of the meaning of life is a strange problem, which, if not difficult, it is at least pompous, irrelevant (idem, p. 19); (d) others believe that such a problem "has a threatening, almost obscene meaning" (ibidem); (e) for others, the issue of the meaning of life is "so disarming that they have no courage to say anything sincere and earnest" (ibidem); (f) others, on the verge of depression, are desperately looking for a solution.

From the point of view of R.F. Baumeister (2011), the major problem of our times is not that of the lack of meaning of our personal lives, but that "we have too many meanings" (p.20): sectorial, fragmentary. Thus, according to the North American psychologist, "modern anxiety consists in the anxiety felt to the possibility that these fragmented senses do not integrate into a significant whole" (ibidem). In such a situation, "if we are not careful enough," notes R.F. Baumeister (2011) – it may be that the meaning of our life be transformed into an undefined and unsettled mix of

everyday problems, ready-made ideas, small dissatisfactions, unparalleled views and clichés.” (Ibidem).

The author finds that “modern (Western - o.n. - G.A.) life lends human beings a multitude of meanings, without offering them an exact guide on fundamental values” (idem, p. 21). In such a situation, the modern (Western) man responds to the value crisis (the substantiation of the founding values) by “attributing a particular importance to the self and exaggerating personal identity, transforming it into a fundamental value” (ibidem).

For most of the Western culture's subjects, such an option seems the most viable, the most consistent. They think it must be so, and it cannot be any different. But resorting to such a solution - the renowned social psychologist warns us - the human being becomes extremely fragile. He notes “if we rely solely on finding personal identity and self-knowledge so that we can attribute a meaning to our lives, we become more vulnerable to death than we have ever been. With death, the self is reduced to nothing, thus losing its ability to give value. Consequently, by death, we lose not only life but also some aspects that have given it value. Unlike us, our ancestors - writes the author - comforted themselves with the idea of perennial values that survive” (p. 21, pp.). In fact, concludes the renowned psychologist, “most people just fumble through life, doing what they are asked to, resigned in doing what others do” (ibidem).

In turn, B. Hours (2010) considers that the human being has always faced alterity. All the more so, perhaps, in modern times. The individual has the ability and the right to convey their own meaning to their individual and collective life. But to reduce this meaning “to a single calibrated model which is, above all, Western, means, in his opinion, to assume a considerable risk for human societies” (p. 15). In the view of the French anthropologist, everything is directed to make plausible “a simplified and caricatural representation of human dignity” (ibidem), in the context and under the pressure of an ideology that “overdetermines the unifying effect” (idem, p. 106).

As far as his analysis and philosophy is concerned, G. Anders (2016) considers that the market society confines to a very narrow understanding, as narrow as superficially matter-of-fact, the issue of the meaning of life. For the German thinker, the vast majority of the members of this type of society reduce the meaning of life to “receiving the pay check” (or more recently by having it wired in their bank accounts). They only know one meaning, “and they can only know that one”; or, in the author's view, if this is their only connection to life, it means that most “lead a meaningless life” (p. 387). This situation seems, however, more bearable than “the senseless vegetation of the unemployed, who is not even granted the privilege of meaningless work” (idem, p. 388, pp.).

Also, the German thinker notes, another reason for the majority experiencing the lack of meaning in their lives lies in the fact that “we are condemned to live in a universe of means” (ibidem, pp.); that is, in an artificial world, where “the ultimate ends are meaningless” (ibidem). Therefore, the hyper-technological and hyper-consumerist universe, dominated by market efficiency, and subject to it, makes no sense, as “in this universe everything is only a means and nothing is purpose, and meaningless is also our obligation to live without the possibility of escape from such an absurd universe” (ibidem).

In these socio-economic-financial circumstances, most repress the (deeper) need for meaning in their lives. G. Anders (2016) argues that the number of those honest enough who recognize their meaninglessness is “infinitely smaller than of the ‘repressors’” (idem, p. 389). In this world, however, most of them manage to get “a ‘meaning prosthesis’” (idem, p. 393, pp.) when confronted with the need for some meaning in their lives. The German philosopher writes: “As the satiated individual is not as aware of the fact that he is not hungry, as the famished is conscious of his hunger. Satiety does no gnaw”, so “the happy man is not as conscious of his ‘meaning’ as the unhappy one who is conscious of his own lack of meaning” (ibidem). For G. Anders, the man of the consumerist society is trapped between a meaningless life and one with a reduced sense of the monthly reward necessary for

survival or for the fulfilment of his consumer role (always frustrated and forced to consume, to consume and to throw away, to always throw away).

As there is an implicit perception, memory, learning, thinking, motivation, and emotion, there seems to be an implicit (unconscious) meaning of life. Most people - more or less educated - live in this unconsciousness. Only when they feel the need for an all-encompassing meaning, do they discover (understand) that their life could have one (or could be conveyed one).

After that moment, some begin to chase it and look for it, thinking that it might be (or might exist) in something or somewhere; others seek to reconsider their attitude towards life, to (re) organize it, to correlate its fragments, episodes, experiences (as coherently as possible), to give them unity, a stable, sustainable, consistent foundation. However, it does not seem to make them fully aware of it; there's something (more), deeper, coming from the unconscious (be it collective, matrix, cultural, archetypal) that supports its clarification and definition.

Of course, the theme is very broad, little studied and, most of the time, poorly treated, if not with self-importance, then superficially, simplistic. It does not save us from dilemmas. From these, could we refer to the one that targets the fact that the meaning of life is a futile search or a sign of the spiritual maturity of the seeker?

4. Unconscious and conscious. Possible conclusions and recommendations

The relationship between the unconscious and the conscious has incited and probably will always incite - and not only psychologists. As much as we ignore or treat it with superficiality, the unconscious is part of our psychic and relational-behavioural lives; it cannot lack. Its presence - in a larger or smaller proportion - is permanent.

Nevertheless, we believe that we cannot leave our inner and social lives entirely and always at their discretion. It is hard to believe that we may ever be willing, as people, to accept to leave our choices, choices, decisions, reactions, attitudes, the course of life under the rule of the unconscious.

Permanent and healthy development of consciousness is necessary; in life, we need (as much) possible awareness, clarification, focus. From the point of view of D. Goleman (2014), there are the following types of focus/ concentration:

- attention/ focus on the inside: it “brings us on the same wavelength with our intuitions, with the values that guide us in life and with our best decisions” (p. 15);
- attention/ focus on the other: it “smoothes our ties with other people” (ibidem);
- attention/ focus on the outside: it is the one “is what eases our living in the wide world” (ibidem).

In fact, on our focus - and on its quality, direction and frequency - depends our reality (in which we live our lives and about which we have something to say). Unfortunately, most of us often put ourselves on auto pilot. It is necessary - given that “we are to a great extent unaware of the existence of those forces of subtle marketing” (idem, p. 43) - of “active engagement of attention” (idem, p. 48).

At the same time, the author of Emotional Intelligence notes that - no matter how surprising - “the wealth of information generates depletion of attention” (idem, p. 20). Overloading attention “restricts mental control” (idem, p. 41). Researchers have come to the conclusion that “an existence dependent on the temptations of the digital world creates almost constant cognitive overcrowding. And overcrowding weakens self-control”; for example, lost in the digital universe, we stretch our hand unconsciously after the box of candies, the chocolate bars; hence, eating disorders, obesity, etc. (idem, p. 41).

In the same vein, D. Goleman (2014) states that: “the source of elements distracting our attention is not so much in the technology we use, but in the frontal assault on our ability to concentrate on the gigantic wave of temptations that distracts our attention” (idem, p. 30), with all the mental, emotional and behavioural effects that derive from here. For example, “the avalanche of messages, films, videos and the diversity of texts we are bombarded with online seems to be the enemy of our fullest understanding” of

the awareness of the world within and without us (idem, p. 28). In short, awareness, clarification, and focusing mean lucidity, capturing and controlling ideas, intelligibility, predictability, taking responsibility.

It is important to know how well we do and what our motives are; to keep our lives within the boundaries of our analytical, critical and self-critical spirit.

We live in a world where psychological, silent and refined manipulation techniques (of the unconscious) work and where there are people/ groups interested in gently influencing our opinions, choices, decisions, actions. In the context, it is decisive to be attracted, to be incited by questions, by (mental) correlations, interrogations and self-interrogations, queries, dilemmas, paradoxes, inconsistencies, oddities (in deepening and/ or deciphering them).

In short, let's leave unconscious with its contributing part to the development and enrichment of our lives, but let's also cultivate our attention, focus, awareness, without making rationalization an obsession, an absurdity, an end in itself.

Consciousness means ability for reflection, conceptualization, research and investigation, access to the meanings of our experiences, self-control, self-analysis, self-education, responsibility, self-actualization/ self-accomplishment. To sum up, as actors of education, we have the duty to train, facilitate and support lucid, critical spirits, attentive to their lives and to others, creative and responsible

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Premises for pedagogy reconstruction in Howard Gardner's vision

Cătălina Gabriela Cristea^{a*}

^aUniversitatea "Spiru Haret", Strada Fabricii Nr. 46, G Sector 6, București, România

Abstract

Our study analyses the premises of pedagogy reconstruction needed in the frame of postmodern, international society based on knowledge. At this level it values the research imposed by the psychology of education, in the process of transforming some descriptive learning theories into models of prescriptive and standard instruction (J.S. Bruner). This kind of research is the one that Howard Gardner made valuing „the multiple intelligence theory” from pedagogical point of view. In the book „The disciplined mind” it appears such a model of learning designing for reconstructing modern and postmodern pedagogy.

Hermeneutic analysis of this book, realised from the perspective of curriculum paradigm allows the identification of the following premises needed in this process of reconstruction: a) re-estimate of education finalities; b) fixing the values and general contents of education; c) design „learning for future” from institutional and curricular point of view.

Re-estimate educational finalities involves: A) defining the education ideal on a continuous historical line - the ideal of education designs „the learning that every child needs apart from information and standardized tests”; B) naming general purposes: b-1) „model grown-ups roles”; b-2) „transmit cultural values” C) realising general purposes as „specific purposes”: c-1) transmit cultural roles; c-2) transmit valuable knowledge; c-3) communicate some „subject contents”; c-4) promote some „ways of thinking”- needed in information society, based on knowledge and supported by the curriculum.

Fixing the values and general contents of education - it is necessary for the reconstruction of educational disciplines. It involves their connection with some concepts such as: -beauty, truth, goodness- that support the essential contents at the level of pedagogical relations between intellectual education-esthetical education-moral education.

Design „learning for future” – it is realized on some levels: a) institutional level: to have an open school, functional as an social organization which learns all the time related to the world; b) curricular level: to use the curricular paradigm in the reconstruction of curricula, programs and textbooks.

Keywords: theory of multiple intelligences; psychological theories of learning; pedagogy reconstruction; curriculum paradigm; training models; education values: truth, beauty, good; design „learning for the future”.

1. Introduction

Our paper is related to two major themes: Curriculum and Education: challenges in contemporary education. The theoretical framework is imposed by the specific of Curriculum Theory. It is considering the psychological foundations of curriculum stated in contemporary education, modern and postmodern pedagogy and postmodern society. The methodology used is typical to historical and hermeneutic inquiry.

The theoretical and methodological frame that I have stated, allows the analysis of H.Gardner's work in terms of curriculum and psychological theories of learning, treated as models of effective training in modern and postmodern pedagogy. From this point of view, we can highlight the extensive educational resources that education design model proposed by Gardner holds. It is exemplified at the curriculum building level, based on the theory of multiple intelligences who cultivates student's "disciplined mind" in the modern and postmodern school. The theme is up to date. It calls for a reassessment of the relationships between psychological theories of

* Corresponding author. Tel.: +40729030572
E-mail address: gabi_cristea2007@yahoo.com

learning and pedagogical models for curriculum design required in modern and postmodern pedagogy, in postmodern society.

Learning theories, used in education psychology, are considered „descriptive models of psychology” by J.S. Bruner. They describe psychological phenomena, cognitive processes and psychic personality characteristics, involved in learning activity. They don't establish pedagogical norms needed for stimulating success in scholastic learning. It is important, for pedagogy, to transform psychological theory of learning into a pedagogical/ didactic model which shows the norms and desing the way to full success in learning. It is what J.S Bruner himself says in his books (see J.S. Bruner, 1970a; 1970b translation).

Psychological learning theory, launched by Howard Gardner is the multiple intelligence theory. On it, is designed a new way of see the pedagogy which uses Human Intelligence Resources that are various: special, musical, kinesthezical, naturalist, interpersonal, intrapersonal, existential. All this types of intelligence must be used in learning process, in other to individualise and to make the difference in learning success inside and outside school. We do not have to stay still in that traditional thinking focused on linguistic and mathematics intelligence design by standard tests that do not see the pupil's personality as a whole” (see Howard Gardner ,1996).

Howard Gardner's experience, achieved in time, constructed on efficient pedagogical didactic model based on valuing multiple intelligence theory. This experience is described by Howard Gardner's in the book „The Disciplined Mind” (2000, translated in 2005). The author promotes, in the subtitle of the book, an axiom need for the postmodern pedagogy which wants to use every intelligent resource of every child, every pupil, every student, every educated-to-be person. This axiom refers to „the education that every child needs beyond any information and standard tests.” (ibidem, p. 1).

Related to the needs we can find the premises of pedagogy reconstruction in the modern and postmodern society. They are the following: 1) Re-estimate the educational finalities; 2) Fixing the values and general contents of education; 3) Designing „education for the future” from institutional and curricular point of view.

2. Re-estimate educational finalities

This first premise, which allow the reconstruction of modern and postmodern pedagogy, is described in the title of chapter One, seen as „a personal introduction”. It is a generic title that evokes the modern pedagogy ideal, launched from the first beginning through Comenius's contribution who designed in the XVII century an “Didactica Magna” which was able to learn everybody what is important and useful for a current and future existence. Howard Gardner takes this pedagogy ideal in a double formula:

synthetical –“an education for all human beings which asks so much from everybody teachers and pupils, society and individual persons readers and writers”.

analytical - an education which forms „the world-wide citizens who are wanted to be read, disciplined, able to think critically and creatively, to have knowledge about various cultures to be able to take part actively in this discussions about new discoveries and to be anxious to assume the risks of their own beliefs.” (ibidem, p. 26).

This type of education ideal has a great psychological and social force. It stimulates the reconstruction of modern and postmodern pedagogy through historical re-estimate of „two great objectives of education”, which can be identified „along the time through different areas of the world”: A) „to model the grown-ups role”; B) „to transmit the cultural values”

These two general objectives of education have evolved historically according to the degree and rhythm of development, in the pre-modern, modern and postmodern society. In pre-modern, traditional societies, the grown-ups roles and their cultural values „developed very slowly”. In modern societies, the grown-ups roles and values developed faster. And today, in a postmodern society „the roles have changed

considerably from a generation to another one (or from a decade to another one), having a significant pressure to education institutions.” (ibidem, p. 29).

The two general objectives of education are promoted by the modern learning systems in various aspects, shown as „lasting options”. Related to Howard Gardner’s analysis, we can point the following four general objectives: A) to transmit cultural roles; B) to transmit valuable knowledge, on a social and cultural level; C) to communicate some „subject contents”; D) to promote some „ways of thinking.”

These four objectives are considered „lasting options”. On their level, education (training, the learning system, learning) evolves during the time, to different trends:

a) widening-deepness; b) achievement-construction of knowledge; c) useful results-intellectual evolution; d) uniform education-individualistic education; e) public learning-private learning; f) instruction focused on scholar subjects education „that minimize and criticize assessment”; g) education based on evaluation „that minimize or criticize the evaluation” h) standardized learning: relative, different, high, universal; i) education “that brings on top: technology-human dimension.” (ibidem, pp. 38-42).

The solution of postmodern pedagogy that Howard Gardner proposes, involves the assumption of some open options, seen in the frame of postmodern social cultures and reflected by the curriculum paradigm. They express clearly and open the choice for: a) the education which involves the knowledge deepness (and also to accumulate knowledge); b) individualised education, „paying attention to the difference between people and development”; c) „education focused on school subjects, with continuous assessment”; d) education that values technology as means and not as purpose.

From this perspective, Howard Gardner rewrite the most important „purposes of education” such as: 1) transmission of values; 2) model of roles; 3) assimilation of codes; 4) assimilation of subjects on a cultural level. These universal purposes will define the quality of curricular design process of school subjects related to general values, historically confirmed, permanently on evolution in the current and future postmodern society. (ibidem, pp.42, 43).

3. Fixing the value and general contents of education

Education finalities (education ideal, general objectives, specific education/learning/ school objectives), analysed by Howard Gardner from a historical perspective impose and confirm the existence of some general pedagogical values, reflected on the level of general educational contents, and assumed by schools and universities. In this way, Howard Gardner offers „a clear perspective” of education, based on three universal pedagogical Values - The Truth, The Beauty and The Good - that represent three general contents of Education, needed by all school subjects on every level, in a formal and non-formal context, with permanent openings towards informal: Intellectual Education, Esthetic Education, Moral Education.

The thesis from which Howard Gardner starts, has the value of an axiom which is the basis of curriculum design in pedagogy and postmodern society. „The Content of Education” must be focused on essential values.

These essential values are defined by Howard Gardner with the following terms:

The Truth – must be seen as a value „related to everything hidden beyond it, such as the fake or the undetermined.”

The Beauty – must be seen together „with its absence from bad experiences or objects and kitsch.”

The Good – must be seen as a fundamental field of human existence which teaches us the most important lesson of life „what good and bad mean.”(ibidem, p. 16).

In the field of The Truth/ Intellectual Education, Howard Gardner sees Darwin’s theory which help us to understand the laws of a certain subject (such as Biology) and „an entire string of subjects that affect human beings today”, human behaviour told in „socio-biological or evolutionist psychology” terms.

In the area of The Beauty/ Esthetic Education, Howard Gardner gives, as an example, Mozart’s music from „Figaro’s wedding”. The superior formative value of these, come from an „elaborated artistic language, the credible characters of his

heroes, the way through which he evokes the spirit of the epoche”, the ability to help us understand „the decisions we make as citizens”.

In the field of The Good/ Moral education, Howard Gardner shows a tremendous historical example - „the events known as The Holocaust”. Howard Gardner enlightens the fact that „the presentation of historical events” in a way that respects the true values has a superior moral signification in our formation. He refers to a „larger significance” of historical events, important „to understand and reflect world-wide human beings responsibility.”

The curricular design of scholar curriculum must always be on superior resources of formation, given by three fundamental pedagogical values, shown in a double perspective by Howard Gardner:

The perspective of a certain subject: a) biology – the truth/ Intellectual Education values; b) music – the beauty/ Esthetic Education values; c) history – the Good/ Moral Education values.

The perspective of all learning subjects, for one subject or for some subjects connected together, with common purposes: intellectual, esthetic, moral that follow the idea „people should understand” and see the beauty and the good that there are in the world.

So, all school subjects realise the finalities of education in post-modern society, which are subordinate to the ideal that designs „a education for all human beings” able „to deeply explore a set of human achievements such as The Truth, The Beauty and The Good.” (ibidem pp.19, 20).

4. Designing Education for the Future

In his analyse, Howard Gardner takes into consideration education design for the future, seen from two perspectives: A) The perspective of scholar institution; B) The perspective of curricular construction.

The perspective of scholar institution is analysed from historical perspective. Howard Gardner criticise the conservative trend of schools. He notices that - „excepting the church, no other institution has done so few fundamental changes such as school which takes care of official education of our next generations.” So, the features noticed in 1900 can be seen in the XX- XXI centuries: a) lecture preponderance; b) the accent on exercise; c) decontextualised didactic materials; d) shown learning methods; e) activities based on a still-frame of design, permanently retaken; f) assessment of knowledge based on „standardized tests”, given weekly, monthly, etc; g) educational experiment realised periodically or limitedly. (ibidem, p. 44).

In XXI century, school reconstruction has as a premise the social progress in technology, culture, democracy, community. This general social progress will make an essential change in: a) traditional school „subordinated only to a upper-class”; b) modern schools which still stress on knowledge and selection, favourable to certain social categories.

Postmodern scholar institution will evolve in quality according to some social forces: a) epoqual technological discoveries – „computers which a-1) allow personalizing and active learning”; a-2) give same strong information which needs to be pedagogically controlled; b) political trends favourable to social active democracy – which will positively influence education politics; c) globalised economy based on knowledge – which realizes a new mission of the school in the area of knowledge and permanent learning; d) permanent scientific knowledge in contradiction with „conservatory educational systems” – which will impose the pedagogical remake of information on disciplinary, intradisciplinary, interdisciplinary, and transdisciplinary levels (ibidem, pp. 45-59).

The perspective of curricular construction is seen by Howard Gardner, „beyond the modernism.” The American psychologist confirme the paradigm value of the curriculum in the postmodern pedagogy. The curriculum paradigm offers a strategical, global and open solution, needed for transpassing the limits of psichocentrisme or sociocentrisme modern pedagogy.

Postmodern curriculum needed in postmodern school „has no pretention to be forever”. It is built on three general objectives (ibidem, see pp.59-64):

To clarify the current cultural concepts about pedagogical values:

- The Truth, The Beauty, The Good;
- To promote „a high standard sense”;
- Reporting to the perennial historical values of education, psychological and social (cultural, anthropological) addressed.

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Case study as a system of meanings

Victorița Trif^{a*}

*University of Bucharest, Faculty of Psychology and Education Sciences, 90 Panduri Avenue,
Bucharest, 050657, Romania*

Abstract

In recent years much attention has been given to the multiple case studies from the vantage point of the following research questions: what is a case study research? what is a case study good for? what are the principles of the case study? There are discourses convergent with theoretical education, with philosophical pedagogy, with experimental or with philosophical assumptions, with educational psychology, with pedagogy involved in ICT, with social sciences in general, with educational psychology, with classroom management, with psychotherapy, etc. This paper discusses the Romanian case study in schools as recent pedagogy from the vantage point of a multi-level perspective. The case study is considered a very sophisticated situation which might be assumed by an educational and psychological network. The empirical research presented is based on an investigation conducted from 2014 to 2017. The target population consists of 546 teachers, psychologists, school counselors and students that were invited to report case studies on learning in accordance with their personal experience. The objectives of the research are as follows: a) to examine the Romanian case study trends related learning issues (the ethnographic part of the investigation which aims to clarifying the culture of Romanian case study); b) to identify the communication features of the data collected. The discourses collected are considered mental representations of case studies. The cases are related to classroom management, educational communication, assessment, educational psychology, educational sociology, educational counseling, etc. and suggests social dissonance in schools.

Keywords: case study; communication; education research; educational psychology; learning.

1. Introduction

Some theoretical considerations on case study are profitable for the social issues as well as for epistemological approach. There are multiform investigations and definitions of case study: classic case study, multiple case studies, single case study, case report on literature review, case process, case outcomes, good case study, case study as part of the society, case study as natural experiments, case study as an approach to moral theory, case study as narrative reflections. Because this paper is part of a series of articles on case studies, discussions refer both to the canonical requirement of case studies (tipology, limits, constraints) and to alternative or open educational inquiries. For this reason the research could be considered a multicase study research in order to rethinking subjectivity. On the other hand, as a part of the author's longitudinal research, this paper argues the need for a new concept related to the phenomenon introduced by the investigation, i.e. social dissonance. Social dissonance concerns the various relationships between social cultures or social cognitions; in this research is defined as countercultures (one culture is discrepant with one another). The theoretical background of the intellectual wording is based on scientific narratology – educational, psychological, sociological, and philosophical underpinnings of the case study (Trif, 2014, 2016, 2017).

* Corresponding author. Tel.: +40722403572
E-mail address: victoriatrif@yahoo.com

2. Methodology

2.1. Objective

The route of this research is convergent with the following objectives: a) to examine the Romanian identity of case study related to learning issues (the ethnographic part of the investigation which aims to clarifying the culture of the Romanian case study) and b) to identify the communication features of the data collected.

2.2. Participants

The target population consists in 546 teachers, psychologists, school counselors and students in Teacher Training – males and females, ages 20-35 - that were invited to report case studies on the topic of learning in accordance with their personal experience.

2.3. Instrument

This research is based on case study; the scientific framework is complex because it is considered a method, a tool, an approach, etc. In this paper the case study illustrate the requirements of research methodology taking into account arbitrary subjectivism. The methodological framework on case studies is complex combining qualitative, quantitative and a mixture types of investigation; exploring particular phenomenon (single case study) or multiple issues (multiple case studies); in exploratory, descriptive or explanatory ways of covering the topic; intrinsic, instrumental or collective; interpreting the data in day by day context or in laboratory circumstances; following taylorized steps of case study design, assuming creative contributions or connecting to case study crisis; personalizing in sense of providing context-dependent reflections or inserted in the academic market of exploration and explanation. The literature leads to different project and various styles of case study research applicable in medicine, psychology, psychiatry, geography, advocacy. From the amount of methodologies – quantitative, qualitative, comparative, historical, social, statistical - it was assumed the qualitative perspective on case study as real-learning report.

2.4. Procedure

Each member of the target population had experience in indentifying, evaluating and reporting case study. The semi-structured interview asked respondents to exemplify a case study on the learning issue according to their previous personal experiences. All the participants were trained on learning problems and on case study. The written task requested each participant to develop an example of case study research strategy. The meta-analysis of the international discourses on case studies has demonstrated that there is a multi-level perspective, involving psychological features, electronic examples and records, medical design, behavioral assessment, experimental effects, etc. In fact, the investigation has started from the classic or conventional view of case study, but it has produced unconventional meanings inferring social dissonance and a new human agency into the educational environment. For each narrative communication there are new forms that emerge, new modes, new tools, new features in sociolinguistics, knowledge. The paper tested the hypothesis that communication (in terms of micro and macro levels indicators) from the case studies is related to countercultures (or to social interrelated mechanisms).

2.5. Data analysis

The qualitative analysis of data collected indicate a multiform structure of the narratives (Stake, 2013). There are included: semantic memory, cognitive tools, creative thinking, problem solving, critical skills, moral assumptions, motives, goals. In the narratives are incorporated elements of theoretical framework, practical analysis and conclusions of case study selected; sources or links of the case study, explanations, consequences for educational process; arguments, detailed case study, intervention planning, comments; synthesis of the issue, objectives, psychological and educational experiences involved; strategies and methods; introduction, case study description, solving proposal; sources, analysis of those involved into the problem (students or pupils, parents, school staff, parents), solutions, conclusions; case presentation, sources, strategies / principles/ solving steps, comments or reflexions; story, problem causes, behaviors and misbehaviors involved into case study, related educational events, solutions. Beyond the preferences expressed of the target population, these characteristics reflect the multiple levels of knowledge adopted in the communities of practice: there are social sites, theoretical underpinnings, various practices, critical inquiries. It is possible to consider that the asynchronous academic network of case study is reflected into the narratives. From the vantage point of simple statistics it is difficult to establish the types of response, but the findings reinforce the importance of allowing students to personalize the algorithms of conducting case study. The psychological, the educational, the social and the sociological communities master in a different manner the scenario of case study and contribute to identify the logic rules in very different contexts. Currently, symbolic data analysis demonstrates that the patterns adopted by the respondents are various combinations of formulas from different fieldworks. The typical conventions from the research methodology are convergent with some logic models of knowledge; the procedural characteristics, the designs, the methods (qualitative, quantitative, mixed), key question ("how?" and "who?") used by the target population are relevant for rival explanations from the research areas.

3. Results

The results are consistent with the hypothesis. In terms of communication paradigm, the discourses answer to the question "who?" examining the specific propositions that explain the student life, the classroom life or the school life. The following qualitative cross-synthesis shows the confrontations between members of the class or between groups: "the father is aggressive; E. is a school girl and she is punished by her father; the teacher is well-prepared and warm"; "it is a confrontation between students"; "the relationships between children and parents are normal; L.S. is a good student; the attitudes of classmates towards L.S. are negatives"; "it is about an emotional trauma"; "it is a fight between two colleagues from the same high school: verbal conflict, incident and so on"; "local community is divided: ones sustains the teacher and the others are against teacher"; "the boy is running from home; his behaviour is a problem for the entire community". These examples evidence that are twofold enemies described by the target population: the outside enemy, the inside enemy. This understanding is significant for the master argumentation; the factors involved are multiples: values, beliefs, ethics, attitudes, risks, behaviors, communication issues. The semantic contents highlights sets of observations from an academic construct and forms of conceptual representation concerning "who" and "how" created the human agency into the case study.

4. Discussions

Most of the cases reported could be considered as an epistemological discussion of introduction to case, description, rhetoric analysis, scientific organization of planning intervention. The current work is focused on examining the case studies as texts linguistic approach. Critical discourse analysis demonstrates, paradoxically, creativity

and resistance, misunderstandings, ludic constructions, prejudices, difficulties of negotiating the educational "debate"; all of these are considered normal parts of narratives as a whole. The linguistic resources from the results illustrate two levels of indicators: micro level indicators (e. g. word and sentence) and macro level indicators (structure of the case study as linguistic text). In terms of genre or text structure, the qualitative research identified a multiperspectival frame of analysis. There is a huge number of coherent stories or axiological works on adolescents, disputes between different educational and non-educational actors, social problems, countercultures, confrontations, limits of communications, contradictory decision-making, ambiguous practices, incidents, war for power, bad experiences, modes of cognition, types of attitude, unpredictable situations, chaotic educational circumstances, confusions. The limits of the results are depended on the participants' professional knowledge. A few of misunderstandings are caused by the lack of theoretical framework: the students don't know the principles, the rules, the strategies or the logic of educational and psychological epistemology. These can explain the monolithic view of the problem involved: with few exceptions, the task is explored in terms of scientific knowledge.

Table 1. Categories involved in systematic observation

Category name
Social Dissonance
Style of relationship
Human Agency
Behaviors
Conflicts
Communication

Taking into account the communication theory's multidisciplinary origins and the fact that sentences are basic contexts of meanings, this article demonstrates that the case study could be considered system of meanings. The results contain moral dilemma, examples of moral reasoning, moral values, links with conscience issue, implications of the cases described for caring and justice, responsibility, etc. The most important contribution of this article is that the identity of narratives is convergent with everyday religion (Cristian, 2015), bioethics, moral communication, moral curriculum. All of these reminds us that the moral consequences of the educational actions are central for the learning.

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Quality culture in school organizations in Romanian education

Corina Iurea*

Educational Sciences Department, Petroleum-Gas University, Bd. Bucuresti, 39, Ploiesti, 100680, Romania

Abstract

In contemporary Romanian society, education is an area holding everyone's attention. Considered "national priority" by law, it is however poorly financed; instead, the requirements are aligned to European standards. The law establishes standards, control procedures, evaluation and quality improvement methods. Several state institutions were created, whose prerogatives are to control and evaluate school organizations in measuring the quality of educational programs they offer to beneficiaries.

In this paper I tried to identify whether the objective of school organization is achieving standards or merely 'gathering evidence' in view of achieving certain standards; whether all the documents required by control institutions are absolutely necessary or are mentioned in the legislation; or, maybe, it is all about the censorious and overzealous approach of the specialists sent in control.

Keywords: organization culture, quality culture, education quality management

1. Introduction

School should be regarded as an organization that carries out education and training activities in a competitive market for service providers. Its competitiveness lies in the capacity and speed of adapting to the needs of the economic and social environment. The products it markets are skills (Olaru, 1999). The services provided by a school can be considered "quality" only to the extent that its products and processes meet the needs, requirements and expectations of customers (businesses, organizations, pupils) and partners (state, community, local public administration, parents).

If we do not trust the seriousness of the teachers, who have to secure an educational process, which will fulfil the educational ideal of the Romanian education, then maybe the way of selecting the teachers should be corrected (Burdus, 2007). Personally, it seems to me a waste of energy and materials. You can do many projects and, at the end, the beneficiaries still have not acquired knowledge and skills that can be useful in life.

Improving the quality of education means evaluation, analysis and continuous corrective action from the part of the education provider/ unit based on the selection and adoption of the most appropriate procedures as well as on the choice and application of benchmarks. Personally, I believe that the only indicators revealing the quality of education are the labour market and the percentage of graduation in the Baccalaureate exam.

* Corresponding author.
E-mail address: corinaiurea@yahoo.com

Total quality management is the set of methods by which total quality is obtained. Total quality is a goal, an objective that must mobilize all the elements of the respective school unit. It indicates the direction of the action (Vlăsceanu, 2003).

2. Methodology

2.1. *The purpose* of our research consists in approaching the concept of quality in education by means of the elements and characteristics of organizational culture in order to achieve an efficient and personalized development of the school.

2.2. *The hypothesis* underlying our research focuses on the two concepts: the quality and culture of the school organization.

If elements of organizational culture are known and exploited, consciously and systematically, then the premises of quality in education are ensured.

2.3. *The objectives* of the research are:

- the identification of the elements that constitute the culture of a school organization and their analysis, in relation to the concept of quality;
- the analysis of the concept of quality in education and its significance, from the perspective of the provider and of the direct beneficiaries of education;
- identifying possible solutions to address quality in education by harnessing the culture of the school organization.

2.4. Instruments

In order to achieve the established objectives, the following research methods were used: questionnaire based survey (the questionnaire for identifying the characteristics of organizational culture, organizational values and the meaning of the concept of quality was administered to the teaching staff); focus group; direct observation.

2.5. Procedure

The instruments we used allowed the investigation of the issues we presented above. The instruments were administered to a sample of teachers and pupils.

Quality in education has been the subject of numerous researches by the Institute of Educational Sciences. I considered interesting the national study conducted in 2013 on the stage of the development of the quality culture in the pre-academic education system. I took over the questionnaire and administered it to the Department of Social Sciences of the Technical College "Lazar Edeleanu" Ploiesti. The group is made up of 10 teachers aged between 26 and 48 (the average age is 35 years old).

At the same time, I designed a questionnaire that I administered on a number of 100 students aged between 16 and 19, 10 to 12 graders, who had time to form an opinion about the school they are currently studying in.

In our investigative approach I identified and pursued several indicators on quality culture in pre-academic education, such as: the perception of the managerial style – how it aligns to expectations; how school's mission is perceived; the degree of satisfaction regarding the educational climate in the school; willingness to participate in collective effort; degree of compliance with the rules; motivation for success; how didactic competence is perceived; the degree of focusing on personal interest.

The eight indicators are tracked by grouping the items. Qualitative aspects are gathered from data collected for each indicator.

3. Results

3.1. *Analysis of the questionnaire administered to teachers*

Perception of the managerial style - the managerial style is of great importance in coordinating the work in view of fulfilling the mission and the vision of the education institution, in achieving the objectives and ensuring the quality of education locally. Style perception can also determine how employees respond to the tasks they have been assigned. An appropriate style succeeds in motivating employees to respond positively and to engage in activities.

From the analysis of the answers it can be concluded that young teachers cannot assess the managerial style and may expect to be told what they have to do. In this situation, communication becomes an important element of a managerial style. Experienced teachers are more critical and consider the style inappropriate.

The most active and involved in the decision-making process are the teachers aged between 30 and 40; the least involved are those over 40 years old. It is interesting to note the high score obtained by teachers with less than 3 years of service in education, who account for 32% of those who believe the managerial style in their unit is appropriate. The lack of experience and terms of reference to previous perceptions as well as a tendency to accept authority makes them more suitable to the managerial style than their more seasoned colleagues.

Students assessed their participation in decision-making through the pupils' council, which has a representative on the board of directors and by the extent of parental involvement in schooling. They have the option of choosing the activities in the School Otherwise program; they can participate in decisions related to school timetable by means of the school's parent committee. School management was considered appropriate by 82% of them.

The negative responses were to some provisions of the Internal Regulations on certain prohibitions established by legal provisions. Students tend to accept and appreciate more than teachers the management style in their school, accepting decisions as they are passed.

Perception of the school's mission - for this indicator, the aspects considered, 'learning to behave', and 'learning how to learn' have recorded the total agreement of all respondents. The answers are credible given that many schools have similar wording in the mission the leadership team sets out. Teachers are confident that the role of the school has evolved from communicating information to teaching skills that are useful to young people throughout their lives. The mission of the institution is formulated as follows: "The College is concerned with providing education and vocational training services based on quality and equal opportunities for all participants in the process, so as to develop students' interest in creating and consolidating their careers, in lifelong learning and in promoting European values".

The degree of satisfaction with the educational climate in the school - the organizational climate is given by the stabilized psychological disposition of the members of an organization. The climate in this organization is determined by factors such as leadership style, director's competence, the degree of socio-emotional integration, human structure, school outlook, communication.

A stressful climate, driven by an inefficient leadership style, an incompetent manager not involved in constructive dialogue with subordinates or grim prospects for school's future, will be a sure obstacle to achieving school performance and achieving goals.

The aspects considered in the items that make up this indicator were safety at school, role-model teachers (question 10 and 11 of the pupils' questionnaire) and the availability and ability of teachers and headmaster to answer the questions asked by students. A high percentage of students (90%) assessed teacher qualities such as communication skills, didactic training, seriousness, creativity, and only 10% ranked understanding and kindness first. Other qualities mentioned were intelligence, initiative, and respect for students, cooperation, and the sense of humour.

Availability to take part in collective efforts - educational activity implies a total, active and positive involvement of both teachers and beneficiaries of education, i.e. students, parents and the local community. The role of the catalyst for commitment lies with the teacher, and for this purpose aspects were considered in the items that make up this indicator, such as the relationship between work and leisure and professional competence vs. cooperation and teamwork; the importance of choosing the activity or the physical work conditions has also been taken into account.

Analyzing student responses on this issue, we find some disinterest in participating in school care and maintenance actions, with 30% of students not attracted to classroom cleanliness and decoration, unless there is a reward.

In turn, teachers engage in the collective effort because they have a gain in improving working conditions or higher scores in the annual self-assessment.

Degree of compliance with regulations - students prefer modes of learning with fixed analytical programs and are primarily concerned with the correctness of responses. Regulations and instructions must not be violated by subordinates even if they consider it to be in school's best interest.

The way in which information is transmitted and assessment conducted by the teacher can influence learning styles. A teacher who uses modern teaching methods can educate the students' preference to developing skills and less to the perfect memorization of data.

It is worth noting the unitary attitude of teachers in complying with the rules as an indispensable condition for creating an optimal climate for school activities. Moreover, students also become more aware that rules are made for their own good, and not to turn the school into a repressive institution.

Motivation for success - a quality education includes managers who appreciate the professional success of teachers as a plus for the school organization, and not as a potential competition. Aspects considered in the items that make up this indicator were ways to perceive school failure, professional success and the importance of stimulating activities. The items on this indicator revealed some interesting aspects of why higher education graduates choose the teaching career.

It was found that women, especially during the first part of their careers, are looking for a safe job to give them more free time to have and raise a child and spend more time with their family.

Instead, unmarried men and women have an interest in career advancement, which gives them satisfaction materially or otherwise, but they also enjoy the idea of job security. Note that education is considered to be still a safe job, despite predictions about the drop in school population and job constraints faced by certain geographic areas or disciplines such as history, geography, social sciences.

Teachers assess the behaviour of the students in the case of school failure depending on the level of education and training of the pupils. We think failure is covers not only dropping out of school, but also poor results in some disciplines. In this situation we noticed a different behaviour. If families are involved in children's education, even if they are at a distance, maybe working abroad, failure is quickly taken note of and measures are taken to solve the problem. If parents are not taking responsibility in the school life of children, things evolve towards school dropout.

Perception of teaching skills - the life of any person who has been through school can be marked positively or negatively by a teacher. That is why the message of this indicator is the extent to which a teacher can be a model for his or her students. A teacher is 'fighting' with the so-called 'models' promoted by the media, besides the fact that the information s/he offers can also be gathered from other sources. Moreover, education is no longer promoted as a condition for success. At the same time, younger teachers consider that the education initiative should also come from the beneficiaries of the education system, respectively the pupils and their parents. Nobody is considered perfect, but didactic competence is indispensable for quality education that meets the needs of students and society.

The competent teacher is also appreciated by students who, in a democratic system, can express their opinion about their teachers, and may even take part in their

assessment. A competent teacher or manager inspires trust in the beneficiaries, thus creating an educational environment conducive to performance.

Focus on personal interest - the competitive spirit and the desire to assert oneself to the detriment of teamwork and cooperation are much more accentuated. Taking age into consideration, the most focused on personal interest are the teachers between 26-30 years of age; by gender, men are more centred on personal interest than women.

3.2. Analysis of the questionnaire administered to students

We analyzed the answers to the questionnaires administered to students and reached the following conclusions:

- they consider unlimited access to training and education facilities important, even if they are under the guidance and control of teachers;
- the class master is the main source of information;
- they participate in decorating the classroom only on special occasions (religious holidays, festivities);
- they appreciate the rewards they receive but sanctions do not please them and sometimes they do not communicate them to their parents;
- democratic teachers who evaluate correctly and now how to communicate are the favourites of today's students;
- students consider communication the most important way to solve conflicts;
- they know what democracy means and in this context they are aware of their rights but sometimes ignore obligations;
- they appreciate how their school prepares them for the labour market and life in general;
- complaints relate to the material basis which is considered insufficient and, of course, to the provisions of the Internal Regulations.

4. Discussions

Scientific research facilitates some of the findings but also their valorisation in the future design of educational activities in the sense of correlating the two defining components for the Romanian school: organizational culture and quality (see Cobianu-Bacanu & Alexandrescu, 2004).

From the perspective of school's organizational culture:

- Each school organization has its own culture, including voluntary and involuntary aspects.
- The culture of school organizations is rich, dynamic and influenced by the school's history.
- Organizational culture is promoted at institution and community level by teachers appointed for this purpose. Those recently admitted into the organization or those from outside know the school's traditions and norms as well as the requirements of organization's management.
- Members of the school organization know the characteristics and elements of school culture, the better as their seniority in the organization is higher.
- The characteristics and elements of organizational culture can be used in view of observing the principles of quality in education and meeting quality standards.
- At school level, some values were identified as school-specific and specific to quality education: solidarity, collegiality; knowledge, learning; cooperation, collaboration; safety; loyalty; order and discipline; Innovation, creativity; respect for the environment. Among those values partially recognized as pertaining to quality education but less illustrative for the school, there are: transparency; accepting diversity; the individualisation of learning; orientation towards the beneficiary.
- Norms rule school life.

- Managers are the main coordinators of school's entire activity, but heads of departments, form masters and the administrative office hold an important role in communication. The only one who does not seem to have a voice is the students' representative. In the questionnaire students notice the non-involvement of the students' council.
- The teacher – student inequality is felt, although student's opinion shows an improvement of the situation in the sense of the democratization of the relationship.
- Student-centred learning is a permanent reality because of the competition between school and a drop in school population.
- Parents' and students' initiatives are limited and address issues that are less relevant to school. Requests for parents' and students' involvement in school life are directed and concern a narrow spectrum of action.

Scientific research has enabled not only the identification of these issues, but also of the generating causes that have proven to be more important when it comes to strategic design (see Certo, 2002).

These may be specific to the educational system or to each school organization (excessive centralization of the pre-academic education system; lack of school autonomy; fluctuation of teachers from one school year to another; most school managers lack proper management training; multiple changes, sometimes irrelevant, lacking continuity (legislative, administrative, socio-economic, political, etc.); the values promoted in teacher training before 1989 (obedience, respect for the leader); distrust in colleagues; suspicion; teacher - student and teacher - parent relationships).

- There is an increase in the share of team activities in school and among students.
- There is an increase in the number of projects at organizational level.
- Student education is approached as a school problem.
- There is interest in working with partners in the local community.
- Attracting parents to school activities is addressed by the majority of teachers, even if they have predefined areas of action.
- School values are acknowledged and accepted.
- The evaluation and promotion of teachers is based on exclusively individualistic criteria.
- Continuous training is based on the interest of the individual, not of the organization.
- Access to the education system and career success depend on individual training and development.
- Highlighting achievements is desired.
- Career development is being pursued. Competition is promoted. Additional revenue is aimed at.
- Order and discipline are preferred to the detriment of tolerance.
- There is a relatively high degree of uniformity in the management and arrangement of premises at organizational level.
- There is concern about maintaining a peaceful and harmonious environment at the workplace; conflict situations are few.
- There is fear of changing jobs; attachment to school, especially among those more experienced, is strong.
- Teachers are tolerant and concerned about student issues.
- Classroom management encourages initiatives and imagination.
- Teachers lack motivation to take responsibility.
- Teachers are tributary to the system, showing reluctance to new challenges.
- The fear of not being mistaken, which entails sanctions, generates restraint.

It is important for the members of the organization to understand, accept and become aware of these issues in order to be actively involved in the complex action of quality assurance.

Teachers do not fully know the meaning of the concept of quality, but believe that their role in quality assurance is very important. Quality is often confused with

functionality. Quality is synonymous, in most situations, with meeting the standard benchmarks. Serious resources are wasted for the external evaluation of organizations, to the detriment of evaluating student outcomes, though one of the principles of quality is 'focus on results'.

Given the current problems of education, school has to look for answers to the questions, "Where should school go and where does it want to arrive?" Once the answer is known, designing educational activities that achieve the proposed objectives can start.

We live at a time when school faces mass media's informal education; with a dramatic drop in the school population; with a school dropout rate of 18-20%, among the highest ranked in Europe. If we add family problems that directly affect the interest in education, we only have part of the context in which we must achieve quality education in Romania.

Competition between schools, in order to have the best possible students, forces each manager to find the best development projects, material resources, financial resources and performing teachers to attract them.

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Variables in designing a curriculum: content, students and the society

Lazăr Emil^a *

^a*University of Craiova, Training Teacher Department*

Abstract

The curriculum is an educational project that contributes to intrinsic and external factors. Society has a substantial contribution to the designing, development, realization and implementation of a curriculum, and at the same extent the decision factor and the designer, but also as a beneficiary and evaluator. At this external contribution to conceiving, development and implementation of the curriculum, are added the students and their features, but also the contents and the organization of school disciplines, inner contributions to the designing and development of the curriculum (in fact). The paper deals with the internal approach and also with the external perspective of the curriculum development and with curriculum perception, starting from used instructional models. Last but not least, there are outlined the principles of conceiving a curriculum from the structural integrated perspective.

Keywords: curriculum; students; society.

1. The theoretical framework

Seen as "an educational project and defined by goals, objectives, ways, means, by the activities used to achieve these goals and methods and tools used to evaluate whether the action has paid off" (D' Hainaut, 1984), the curriculum contains "any educational activity developed by school and conducted toward a goal that takes place inside or outside the institution" (UNESCO, 1975). The concept is polysemantic and requires the clarification and decryption of all meanings of the term, fundamental for the theory and practice of contemporary education (Potolea, 2008, p. 167).

2. Designing a curriculum

Flagging content, detect components, objectives, contents and their interrelations, the goals implementation are divisions / benchmarks in designing, construction and development of a curriculum: the curriculum "states the intentions of training, including:

- a) Defining the target population, the goals, objectives, contents, the description of the evaluation system, planning the activities, the expected results about changes in attitudes and behavior of individuals in the training process;
- b) It opposes the concept of curriculum - describing a list of contents generally used in traditional pedagogy" (Raynal, Rieunier, *Pédagogie: Dictionnaire des concepts clés*, 1997, in Enache, coord., pp. 13-17).

3. An articulated statement of the author's positions

In the International Encyclopedia of Education (2003, pp. 1164-1168) are shown three main directions in designing the curriculum "content and organization of school subjects, as a source for curriculum design; students and their characteristics as a source for curriculum design and society as a source for curriculum design". It is

* Corresponding author. Tel.: 0769648935;
E-mail address: lazaremile@gmail.com

believed that organizing the content on topic of study, on school subjects is a logical and rational structure which thus determines effective learning and understanding of content by students and forming them a broad general culture (Hunskins, 1980). This way of conceiving the curriculum corresponds to the instructional logocentric model, the most widespread model for organizing and conducting the training, which starts from scientific explanted premises (Iucu, 2002, p. 24):

"Science is a product, the finished result and balance of the truths expressed in a body of knowledge; the fundamental objective is the transmission of essential information to the teacher, the model being centered on the absolute monopoly of the teacher.

The training subject is represented by notional aspects, and especially logical and quantitative methods are frequently analytical".

The advantages of this approach are that it can transmit a large volume of knowledge in a relatively reduced time to a very large number of students (economy); are purchases of culture, values which can only be transmitted through this communication channel ("cultural values are not found, but transmitted", J. S. Bruner, 1970). The disadvantages are related to the dynamism of the didactic approach of the actors and the type of performance achieved: generate the passivity of students requiring too little intellectual and emotional resources from students; the formative character of education in this manner is very low: greatly abbreviate learning: knowledge is retained only at mnemonic level, their potential for great operation being reduced; underestimates the reality and cultivate the bookish aspect of the training process. "The attempts to make flexible this vision of the curriculum designing were objectified in multidisciplinary and interdisciplinary organizations. In this manner the contents are not artificially separated", but are studied in an integrated manner in order to facilitate their understanding by students (Andronache 2013, p. 9).

Focusing on the student and valuing his characteristics/ features is another important source in curriculum designing, being a vision of force in contemporary pedagogy, first expressed by J. Dewey, early in the twentieth century. From this perspective, the needs, interests, individual characteristics and age, students' previous learning experiences are the foundation of the curriculum design, the prevalent practice in American education systems. This way, students have the opportunity to select and organize the path of learning, and could choose themselves, or advised, the disciplines and educational activities that match their skills and interests, which are essential for the ability of lifelong learning (as cited Saylor and Alexander, 1974 in Andronache, 2013, p. 10).

Such a curriculum design promotes organized learning by the student for himself and not by others for the student, so the act of learning becomes personalized and relevant and therefore intrinsically motivational for the learners.

This approach correlates with the model of empiriocentrist training, heuristically addressing the training situation, seeing science as a process and familiarizing students with the logic of scientific inquiry, with research techniques. Based on this model, students experience the knowledge and the use of learning through discovery and problem solving. Therefore this learning model is not primarily cognitive, but is focused on the experiences of the student – action, emotional, social and individual. The students design their own self-evaluation and create new challenges of learning. The empiriocentrist training develops the formative contribution to the consolidation of essential operations and intellectual processes.

From this perspective, the training profile of the student covers several directions of his development: "Cognitive development, socio-emotional development, physical development, development of health and personal hygiene, language and communication development, the development of skills and attitudes to learning (for pre-school level), training/ development of communication skills in their native language, training/ development of communication skills in foreign languages, training/ development of mathematical skills and basic competences in science and technology, training/ development of digital skills, training/ competence development of learning how to learn, training/ development of social and civic competences, sense of initiative and entrepreneurship, cultural awareness and expression (for the

secondary level of education, compulsory education and secondary education), learning outcomes", (Guidelines for designing and updating the National Curriculum, 2015, pp. 3-8.)

The advantages of the model are related to the high degree of methodological and intellectual activism of the students, developing students' creative thinking and intelligence. The disadvantages are related to "the big consumption of time necessary for learning increased energy consumption, intellectual impossibility to cover all the contents only by using the empiriocentrist structuring" (Iucu, 2002, p. 32).

The society is a dominant third source in the foundation of curriculum projection. From this perspective, the curriculum is designed based on the prospect of changes in society with the aim of preparing the students to face and adapt to the society they live in. Thus, curricular objectives are designed towards developing students' ability to put into practice the knowledge they hold, the learning content is derived from the relevant social life and is in line with current developments and future needs of society. Educational activities have an important social focus, the students being engaged in activities involving cooperation, communication and problem solving.

This approach in designing the curriculum corresponds to the sociocentrist model of training based on the activity of student in a group, which states the social organization of learning, though, from a psychological viewpoint, learning is individual. "The group becomes an object of the training activity and the sociometrist methods become a support for knowing the collective reality" (Iucu, 2002, p. 35). The main methods of learning are those of "the cooperative" type (cooperative learning skills), self-management, debate, team research. The limits of the model consist of an uniformization and a reduction of the individual role of students.

In equal measure, addressing the fact that society is a dominant source in designing the curriculum, offers the possibility of respecting the individuality of each student, its knowledge and the methods used are: independent work, didactic games and simulation. The motivation is a constant concern of the teacher in cultivating interests, motives and desires of the child (Iucu, 2002).

This approach which leverages the society as the primary source in designing the curriculum is focused more and more on facilitating the integration of students not only in the social and cultural environment of the country in which they live, but also in a socio-cultural environment at a European level or even a worldwide one thus promoting world globalization/ internationalization (Andronache, 2013, p. 10).

There cannot be considered solid the approach of a single instance in developing a curriculum: organizing contents, the students' perspective or the involvement of the society. These may be considered variables and (they) have a specific contribution.

We cannot decide that they are the only instances that mediate the process of elaborating, implementation, development and assessment of a curriculum. This is the perception and pedagogical understanding at this moment.

The future may bring other constitutive factors, for developing and assessing the curricular reality.

At this point there shouldn't be ignored the contributions and the specific of each mentioned category.

4. Principles in designing a curriculum

Curriculum design is a coordinated assembly of anticipation of the development of a training program. This anticipation refers - explicitly or implicitly - to a "plan focused on learning" (Bruggen 1993, p. 3, in Căprescu, Curriculum and curriculum designing). "Anticipation must be realized based on the same rule in achieving the principles of the curriculum:

- The principle of functionality

- The principle of coherence,

- The principle of flexibility,

- The principle of equality of opportunity, accessibility and focusing on the student,

- The principle of using/ of the use of feedback

The principle of efficient and independent learning (Yorke, Macfarlane-Dick and Roy, 2006)

The principle of analyzing the needs of the society: it aims to define the functional skills of the educational process that reflects the macro-structural outcomes of the education system,

The principle of analyzing the requirements of the pupils/ students: it aims to define the educational objectives of teaching that reflects the priorities of the microstructure of the educational process" (in Andronache, 2013, p. 12)

The principle of analyzing the training content: it aims to complete the school programs based on knowledge and essential skills (general knowledge/ expertise), (Iucu, 2002).

To design teaching activities means to link and integrate the operations of defining the objectives, content, learning strategies, assessment exams and their relations (Vlăsceanu, 1986).

This structural perspective to develop a curriculum aims the components/ essential dimensions and their interrelations, the unity, correspondence and interdependence between them (Cristea, 1998): the triangular model (the purposes and educational content, the period of training) or pentagonal model (finalities of education, content, training time, training strategies, assessment strategies) (Potolea, 2002, p. 83).

This approach in designing the curriculum opposes to the traditional approach, which involves limiting the optimal criteria (improving the efficiency of student learning, Iucu, 2002, p. 46) within the borders of priority informative objectives. Because the intellectual aptitudes of the students are distributed unequally (in a bigger scholar population the distribution is made percentage, according to the "Curve of Gauss") it is considered that the didactical activity should have instructive standards that are very different, "from the level of the inferior ones which are accessible to every student to the superior ones which are accessible to just a tiny fraction of the scholar population (2%)", (Cristea, 2000). These content standards are profoundly differentiated, ranked by the difficulty in such a manner that a part of the students can only have access just to the inferior standards, while others can achieve the superior standards.

5. Instead of conclusions

Curriculum design needs to be considered complete (to coordinate the objectives, contents, strategies and the assessment), must respect the principles of the educational process, to take into consideration the material, informational and human resources involved, to be strategic (to aim at anticipating results in management and computational terms: inputs-outputs)

Conceiving a curriculum should be viewed horizontally and longitudinally: the relationship between structural components, the processual concordance, must be accompanied by the perspective of curricular products/results.

The conceptual component gather three (sub)components: the theoretical one and the applicative one (concerning with the option for a specific educational model, as well as with its acting model of implementation), the adjustment one (that aims to establish both the finalities and the principles which will monitor the future) and the projective one.

The strategic component is structured in the following processes: planning the stages/ the steps to be followed, their implementation, the assessment of the first results, the continuous review, based on these results. This procedural approach is also characteristic of a macro level of an educational system.

The characterization words/ key-concepts of a curriculum presupposes: uniform and consistent conception of the curriculum (concordance with the forming/ development of the key-concepts), an integrated curricular approach (different levels of integration), the principle of focusing on student, establishment and pursuit of educational finalities in terms of learning process, a holistic perspective of the dimensions/ of the curricular variables, metacognitive content and resources,

evaluating formal learning situations and nonformal and informal contexts, open educational resources, accessed through new technologies.

Equally, the implementation and the development of a curriculum, involves society as a beneficiary and evaluator of the implementation of a curriculum. The implications of using a curriculum must be viewed in perspective, within the meeting between the present and the future, after secure and sustainable principles.

Sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Our common future, The Brundtland Report, 1987).

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New perspectives on citizenship in the new lower secondary National Curriculum for social education

Angela Teșileanu^a, Ciprian Fartușnic^{a*}

^a*Institute of Education Sciences, 37 Știrbei Vodă, Bucharest, 010102, Romania*

Abstract

The paper explores the new perspectives for citizenship and key competences that are brought about by Social Education, a newly introduced subject matter in the Romanian lower secondary national curriculum. First we briefly present the context of the curricular change for primary and secondary education, originating in the new Law of Education. We then analyze some defining aspects regarding the curriculum development for the new school subject. In this context we highlight the importance of the lower secondary training profile and its components that operate as a conceptual lens for the curricular structuring in each school year. We present the new approach from the perspective of the competence-based curriculum development model and of the challenge to authentically use competences as an organizer of the curricular construct.

The paper also explores the conditions that come along the changes, namely the need to overcome the facts-based approach in both design and implementation. At the same time, we analyze the conditions that are needed in order to organize educational projects as an interdisciplinary learning method, where the teacher takes on the role of a learning facilitator. Thus, our paper represents an invitation to reflect on the particular interventions social education teachers have to put at work so that their students learn meaningfully and reach complex acquisitions.

Keywords: national curriculum; lower secondary education; Social Education; key competences; competence-centered curriculum; innovative classroom practice.

1. Introduction

In 2011 the new Law of Education paved the way to the restructuring of the national curriculum in Romania. The level-based approach has led to a renewal step by step that first brought changes to primary education. In 2015, the new curriculum development reached the low secondary education (grades 5 to 8) by the design of the framework which stipulates the curricular areas, the school subjects per grade and the number of periods/ week for each of these. The new curriculum framework (approved by an Order of the Ministry of Education in 2016) have brought about several changes; one of these is the introduction of a school subject that has never been studied before, namely Social Education, with one hour per week for each of the low secondary grades. This decision was motivated by the need to extend the context of shaping and training the various dimensions of citizenship that previously had benefited from a rather one-sided approach within the Civic Culture from the old framework. The new school subject offers a curricular response to the ever growing need of competences for a genuine participation in the contemporary society, ensures the progression of the specific acquisition from primary to secondary education, according to the 5-8 graders' developmental stage.

* Corresponding author. Tel.: +4-072-332-8851; fax: +4-021-312-1447
E-mail address: cipf@ise.ro

2. Steps in the curricular design of a new school subject

2.1. Lenses in the Social studies curricular development

The training profile at the end of low secondary education, which describes the 8 graders' expected learning outcomes in terms of key competences (Official Journal of the EU, 30.12.2006, L 394/13), has represented the conceptual lens for the Social Education curriculum approved by Order of the Ministry of Education (MEN, 2017). The curriculum development process has been oriented by answering the following questions: How could this subject matter contribute to the training profile structuring? What key competences are mainly aimed at by Social Education? How does this school subject contribute to the development of these competences?

The focus on the key competences and on their subsequent descriptors has put two of these under the flashlight while revealing their major relevance for Social Education: the social and civic competences and initiative and entrepreneurship. At the same time, an analysis of these key competences highlights the knowledge, skills and attitudes that structure the intended acquisition within this school subject. Primarily this refers to: exercise rights, take responsibility, value diversity, operate with values and norms which are relevant for one's personal life and the interaction with the others, implement innovative ideas in exploring/ solving problems of the group they belong to or of the community. These components of the social and civic competences, of initiative and entrepreneurship give a clear structure of the learning process within Social Education throughout grades 5-8 from the perspective of each student's real life. Thus, Social Education highlights various issues the students discover – in a direct or indirect way – by means of belonging to their families or to other relevant groups they are part of.

The curricular/ methodological approach in grade 5 is focused on critical thinking and children's rights. The innovation consists of the integrative dimension that allows students to critically reflect on the rights and responsibilities they have and they must exercise, promote and defend. The approach is progressive since the students practice - on a corpus of problems of fundamental importance – how to think (i.e. to critically think) and not what to think of a given issue. On the other hand, while they practice this approach, the students have to express opinions, ideas, simple arguments which contribute to the development of the communication in the mother tongue key competence and stimulate the students' involvement in their own learning. Consequently, other components of the training profile are put at work which extends and deepens the social, civic and entrepreneurship competences. In this perspective, the curriculum for Social Education transfers the provision in the European Recommendation that explicitly stipulates the interconnection of the key competences both in the learning process and in the applications in real life situations.

In grade 6, the Social Education centers on intercultural education and intends to prepare students for the real life in the context of the "global interconnected world" where: they need to manifest a positive attitude towards his/herself and towards the others, towards their cultural identity and towards the identity of those who belong to a different culture; the cultural differences represent an intricate feature of social life; intercultural communication is a way to discover and relate with others.

In grade 7, the Social Education embraces Education for Citizenship and is thus centered on the values and principles of democratic citizenship. The education influences that are centered on practicing active citizenship unify at the students' level and ensure continuity, innovation and openness. Consequently, there is continuity with the moral-civic literacy started at the level of primary school; there is innovation by the exercise of values and norms that are meaningful for a personal life within a democratic society; there is openness by setting other exploratory actions in the practice of democratic citizenship in the context of future school routes.

In grade 8, students get initiated in financial education and entrepreneurship which continue the exploration of citizenship with the added value of the economical

dimension. Therefore, Social Education becomes a framework to develop acquisitions that belong to the key competences: learning to learn (e.g. the development of goal-oriented action plans), math, science and technology (e.g. problem solving in specific situations such as making up a budget).

The above mentioned examples are enriched with some components of the digital competence and the cultural awareness and expression. By relaying to the flashlight analogy, one can imagine how the initial zoom on two interest cores expands towards other elements given their profound interconnectivity.

2.2. Competences for a global world. Beyond the formal structure

The curriculum for Social Education is competence-based. The concept of competence is the one used at European level in the Recommendation of the European Parliament and of the Council on key competences for lifelong learning (2006/962/EC), respectively as a combination of knowledge, skills and attitudes appropriate to the context (Official Journal of the EU, 30.12.2006, L 394/13).

The curricular structure (in Fig. 1) comprises the following components:

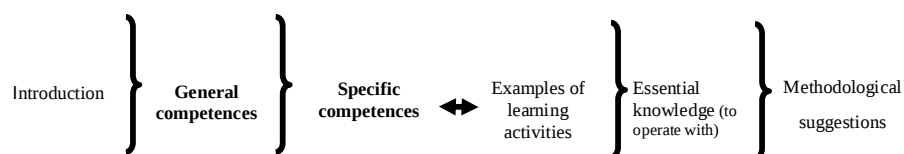


Figure 1. Structural components of the subject curriculum

The foundation core in the curricular structure is given by the competences (in bold in Fig. 1). The main challenge in the curriculum development process for Social Education consisted in the authentic competence-centered approach with an organizing role that: sets the expected outcomes; orients possible learning activities; selects the necessary chunks of information that are needed as an operational basis; organizes the methodological approach at classroom level. There are just a few competences that are stipulated in the curriculum: 3 general competences and 7-8 specific competences for each school year. Thus the time budget becomes realistic from a double perspective: in order to thoroughly develop the stipulated competences as well as to use the latter in structuring other acquisition (given the fact that the curriculum covers only 75% of the time allotted for the school subject in the framework).

The examples of learning activities that are suggested in the Social Education curriculum represent exemplary cases and feature a certain complexity by their varied range and use of modern methodology. The learning activities in the curriculum encourage innovative practices. The competence 1.2, grade 5 (State opinions, explanations, simple arguments to promote own rights and responsibilities) is correlated with the following example: participate in debates starting from questions asked by students (e.g. Do the children rights and responsibilities change in the online environment?). While using the context to develop the digital competence as part of the training profile, the activity offers an opportunity to reconsider the theories of learning by placing ICT in a center role. (Siemens, 2004).

A lot of the essential knowledge stipulated in the curriculum belongs to the practical/ application dimension. For instance, the list includes: the school as an environment where children express/ exercise/ internalize rights and responsibilities; respect and defense of children's rights (in grade 5); disrespect of the values and principles of the intercultural society (in grade 6); civic involvement in the context of representative democracy and of the forms of direct democracy manifestation (in grade 7); personal/family action plans in order to reach a goal (in grade 8).

The methodological suggestions take into account the sustainable effects of the curricular contents and offer examples for planning and the use of interactive methodology as ways to involve students in meaningful learning. Various methods

(such as star explosion, thinking hats, know-want to know-learned etc.) are contextualized for each grade and offer the teachers reference points for the “spirit” of the curriculum, i.e. the qualitative aspect of the latter as observed at competence level, for approaching the essential knowledge and the variety of the learning activities, while respecting the students’ age-related features.

The curriculum aims at directly and explicitly connect the students and the real world by means of the needed competences the first use in order to effectively integrate in the life outside and beyond school; this means to overcome an information-based cognitive level (education about...) and to construct learning at a level of the students’ participation and active involvement (education through...), yet mainly with a focus on a level where learning is reflected in attitudes and behaviors (education for ...).

The implementation of Social Education into classroom practice at various levels of learning is a consequence of the competences role: on the one hand competences are relevant as outcomes of learning; on the other hand competences allow transfer and the use of their components (knowledge, skills and attitudes) in new contexts.

Education about... focuses on the acquisition of notions and concepts that are domain-specific. This level comprises conceptualizations and not just memorizing mere facts as it targets the correct use of concepts that refer to facts, events, processes that are specific to the society. This level of learning is necessary but not sufficient and it needs to be overcome. In this perspective, education through ... refers to the participatory, practical experiences of learning. Education for ... centers on the exercise of concepts and participatory skills, the internalization of values, sustaining or rejecting practices and attitudes, structuring components that are related to the acquired values.

3. Challenges of change. Perspectives for good classroom practice

All the above mentioned innovations share a few principles that feature the future of education: the teachers’ confidence in their students’ learning and competence development; recognition of the meaning of relevance in all the learning issues, assessment included; identifying and developing each student’s talents (Veen & Vrakking, 2006).

Changes bring about multiple challenges. For instance, transferring the competence-based approach from the official curriculum to the classroom practice means to overcome a model where chunks of information and essential knowledge are the only items that matter in lesson planning. For instance, in grade 5, the curriculum offers specific knowledge related to critical thinking and the children’s rights. A strategy to separately approach these two issues will form a gap between the competences that are stipulated in the curriculum and the current practice and will fail the opportunity to contribute at the pupils’ development of self-efficacy, sense-making, metacognition or self-regulation (Hartley, 1998).

Another important challenge of the new curriculum for Social Education is given by project work suggestions for each year on topics relating to the children’s rights, intercultural education, educational community issues and economical and financial aspects. The curriculum explicitly stipulates the educational project at the level of the specific competences, of the learning activities and of the essential knowledge. Project work has an important time budget (25-30% from the total time per school year). When involved in the project, students primarily have a direct experience of carrying out all the stages in a project: from the topic selection to the activities as such and the assessment of the outcomes. This will nevertheless imply a facilitating role for the teacher who is to coordinate the process and support each student throughout project work. If teachers copy/paste projects from other contexts and learning groups, if they impose topics and activity plans, if they ignore the students proposals or exclude them from the monitoring and assessment stage of the project they will undermine the project process. With such an approach, the students’ chance to being actively involved in their own learning is reduced or even cancelled while the curricular innovation to overcome the learning about ... model remains intentional.

The development of new good practices in the near future directly depend upon the Social Education teachers taking on the new roles. Since the students are at an age where their cognitive abilities start refining – in the romantic stage as put by Kieran Eagan (Eagan, 1997) – they need someone to systematically support them while they explore new understandings of the self and of the other. Likewise, they need a teacher who helps them build self-confidence and stimulate them to work in a group or to internalize values such as perseverance, cooperation or tolerance for ambiguity. Last but not least, the students need support to cross the current boundaries between daily life and the school subjects.

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Academic drop-out between individual decision and institutional pressure

Cristina Georgiana Safta*

Petroleum Gas University of Ploiesti, 39 Bucuresti Blvd., Ploiesti 100680, Romania

Abstract

Abandoning university studies prior to obtaining a bachelor's degree is a phenomenon that affects educational systems in many European countries, its effects being felt in multiple ways: at individual level, abandoning studies reduces the chances of becoming a skilled and competent employee, capable of coping with the challenges of the current labor market; at institutional level, reducing the number of students leads to financial losses and diminishing student support resources; at social level, abandoning studies leads to lower productivity and economic competitiveness. In this context, the present study aims at: conducting a careful analysis of the drop-out phenomenon in the academic environment; identifying the main categories of causes and showing how they work; outlining possible solutions to reduce the abandonment rate.

Keywords: academic drop-out; higher education; risk factors; quality of educational services.

1. Introduction

Higher education graduates that amount to at least 40% of the population aged 30-34 is one of the objectives of the Europe 2020 Strategy and reducing university drop-out and increasing the success rate in higher education is a key strategy to achieve this goal. (L'abandon et la réussite dans l'enseignement supérieur en Europe, 2015, p.4)

In this context, the issue of academic success becomes a priority in the European political agenda; the HEDOCE study, conducted in 35 European countries, demonstrated that for three quarters of them academic success is a problem that needs to be treated with utmost seriousness, its consequences in terms of socio-economic development being extremely significant.

School drop-out is not synonymous with student failure. In some countries, even one year of tertiary education can significantly improve the job prospects of the person concerned, while in other countries students can capitalize on credits obtained during an initial training program and can complete their studies once they entered the labour market. (OECD, 2009, p. 24).

However, high drop-out rates may be an important indicator of the existence of problems in the education systems, such as: inconsistency between proposed training programs and student needs/expectations or labour market demands; prolonged duration of the studies (correlated with a number of financial difficulties), students being unable to remain inactive throughout the entire time.

Unlike the general trend across the EU, the dropout rate in academic environment continued to increase nationwide, reaching 19.1% in 2015 (acc. Education and Training 2016 – Romania, p. 3). This is well above the EU average (11%) and the third largest in the EU. Thus, Romania is moving away from its national target of reducing early school dropout to 11.3% by 2020.

Responsible for this state of affairs are a series of challenges still present in higher education in Romania (Ministry of Education, 2015), of which we mention:

* Corresponding author. Tel.: +4-074-459-7469; fax: +4-024-457-5847
E-mail address: crystyne_s@yahoo.com

- funding mechanisms are not flexible enough to provide incentives for efficiency, updates, innovation or equity;
- the quality of education, especially in private universities and non-academic tertiary education, is different;
- the participation of rural students, and of those coming from poor families and the minorities is low;
- the opportunities to acquire those transversal skills that are considered valuable in the labour market are quite limited.

2. University drop-out – an extensively approached object of study

It is difficult to define academic drop-out because it can take various forms depending on: the attitude of the student towards learning; his/ her relationship with the educational institution; the definitive or provisional nature of their decision to drop out, etc. Thus, Grayson (2003) distinguishes the following situations: students who abandon their studies and notify the educational institution; students leaving the institution without prior notification; students who are constrained by the institution to abandon their studies without the possibility of returning in the next academic year; students who voluntarily interrupt their studies with the intention of returning at any given time; students who change the education institution. It is worth noting the distinction between voluntary drop out (taking the decision to leave the study program) and involuntary drop out (the constraint to leave the study program through an institutional decision) is rarely made.

The first theoretical data on the issue of university drop out surfaced more than forty years ago, and for a better understanding of the phenomenon we will briefly present the main theoretical models.

2.1. *The integration model – Tinto V. (2005)*

This model posits that several factors have a significant impact on student behaviour. These factors interact and influence the decision to continue or interrupt university studies. Thus, the model examines dropping out of college from the point of view of integrating the student into the educational institution and of his/ her involvement in the academic community. According to V. Tinto, students come to university with certain individual characteristics, such as: family context (types of family responsibilities, family income, etc.); personal characteristics (personality traits, professional skills, etc.); previous school experiences (training programs, diplomas, academic competences, etc.). All these characteristics are mainly related to the students' initial goals, their educational goals (referring to personal satisfaction derived from a desire to know) or professional (referring to the impact that a training program could have on their career path).

Starting from the individual characteristics, but also from the institutional and social experiences, students decide whether or not they will integrate in the academic and social environment, they decide whether to accept the rules and conventions of the academic environment, whether to comply and be involved in the social life of the new. These aspects of the integration are crucial and feed the students' reflections on their intentions, objectives and commitments to the institution. "The revaluation of the existing concordance between the students' initial project and the conditions operating within the institutional environment will lead to their decision to continue their studies or drop out." (apud Sauv  , L., Debeurme, G., Fournier, J., Fontaine,   ., Wright, A., 2006). Thus, interactions between student and their colleagues or between students and teachers will play an important role in their integration with the institution.

V. Tinto's original model (1975) was the subject of numerous criticisms and revisions, so that in 1993 V. Tinto redefined his original model, taking into account the importance of external factors in the decision to drop out or continue studies; he brings new nuances regarding students' interaction within the institution and within their social group. "There are two types of interaction besides academic and social

systems: formal and informal interactions. On the one hand, institutional experiences can take place in relation to formal education (academic performance, intellectual development) or informal education (interaction with faculty staff). On the other hand, students experience more interactions with the formal (out-of-class activities) and informal (interaction with colleagues) social system.” (Sauvé, L., Debeurme, G., Fournier, J., Fontaine, É. & Wright, A., 2006). Finally, for Tinto, a student's perseverance is reflected both in the way the institution is perceived (prestige, requirements, expectations), and in the way his/ her social (interactions with colleagues and the learning community members) and academic (academic performance, intellectual development, school success) integration is perceived. Additionally, the more students think the institution they enrolled in is quality and responds to their expectations, the more they feel socially

2.2. The integrated model (Cabrera, Castaneda, Nora & Hengstler - 1992) adapted by Sandler (1998)

This model was used to explain dropout rates in both traditional and non-traditional students. For Sandler (1998), a non-traditional student is aged 25 and over, has the responsibilities of an adult (he/ she is married, has a family, takes up a job) or is enrolled in a part time/ open learning program, while the traditional student is aged between 18 and 24 and attends full-time courses (apud Sauvé, L., Debeurme, G., Fournier, J., Fontaine, É. & Wright, A., 2006). If universities want to counter the dropout phenomenon, they have to take into account the new social realities they face and pay more attention to the work-family-education relationship (this may be a key factor in the decision to continue or drop out of university studies) and to develop those skills that will be useful to graduates on the labour market, helping them integrate professionally.

2.3. The model of open learning drop out - Kember

Kember (1989) developed a longitudinal model of the drop out phenomenon encountered in open learning programs, taking into account five major categories of variables:

- student characteristics (gender, age, marital status, number of children, home environment);
- commitment to objectives, i.e. the relationship between intrinsic motivation (student's personal interest in a subject) and extrinsic motivation (student's interest in graduation);
- academic aspects (teaching materials, teacher-student interaction, etc.); Kember considers that two institutional factors are decisive: normative congruence (the degree of compatibility between the content of the study program and the students' interests/ needs in terms of knowledge, between the student's learning style and the way teaching activities are designed); collective affiliation (the feeling of institutional belonging, determined by: the nature and frequency of contacts; the speed with which the student's demands are solved; the willingness to launch remedial programs, etc.);
- social and occupational aspects (student's lifestyle and working style, the attitudes of family, employers, work colleagues in relation to various school tasks);
- cost benefit analysis (the relationship between the financial cost and time involved in completing a training program and the benefits that the student thinks he/ she can achieve upon completing it).

Kember draws attention to the fact that the variables included in the model do not remain constant throughout the study program, which implies the need for students' re-evaluation of the cost/ benefit ratio.

3. Is school dropout a result of students' maladjustment to the learning activity or of school's inadaptation to students' needs?

The causes of academic drop-out are multiple, this being an expression and a result of a double inadequacy. On the one hand, it is about the student's maladjustment to school and extra-curricular activities, and on the other, about the inadaptation of school to internal (biological, psychological) and external (socio-economic, socio-cultural) factors. Each drop-out has a personal and social history pertaining to the way the principle of development is differentially applied. Dropping out is the product of several causal factors in a certain pedagogical, psychological and social configuration which in turn leads to more immediate and lasting consequences.

By compiling a summary of the studies on dropout issues by N. Bissonette (2003) and A.Coulon (2005), Sauvé, Debeurme, Fournier, Fontaine & Wright (2006) group its risk factors into six categories:

- *personal factors*:
 - gender (masculine);
 - age at the time of academic enrolment (older students have less skills regarding new technologies or falling into that category that interrupted their studies and return to university to complete them)
 - mental state: (lack of confidence; stress; problems with transition and adaptation; low self-esteem);
 - motivation (disinterest; demotivation; doubts about degree choice; priority granted to work instead of study);
- *interpersonal factors*:
 - academic and social integration (difficulties in forging friendships; difficulty adapting to the new environment);
 - relations with colleagues and faculty (poor communication within their social network; dissatisfaction in interpersonal relations; social isolation; lack of contact with their peers);
- *family factors*:
 - family lifestyle (dependent minors; lack of means of support);
 - relationship with close family (absence of support from parents; lack of family role models; conflicts, tense relations between family members);
 - parents' attitudes towards school and teachers;
- *institutional factors*:
 - the size of the education institution (increased number of enrolled students; the rigidity of the administrative apparatus);
 - the characteristics of the educational institution (unrealistic expectations of the institution; inadequate student retention strategies);
- *environment/background factors*:
 - belonging to an ethnic minority;
 - financial difficulties (insufficient financial aid; underestimation of study costs);
 - work activities of more than 15 hours per week;
 - considerable distance between home and the education institution;
- *factors related to the peculiarities of the learning process*:
 - gaps in previous training;
 - superficial approach to tasks;
 - lack of academic skills;
 - low academic results;
 - absence of effective learning strategies (difficulties managing and planning tasks).

4. Research methodology

Starting from the increased levels of academic dropout rates at national level and experiencing the real effects of it at institutional level, in the academic year 2015-

2016, the Centre for Counselling and Career Orientation (CCCO) of UPG has defined as a priority objective the reduction of university dropout due to professional or career guidance reasons, personal reasons or maladjustment to the academic environment.

To this end, the CCCO has organized a series of focus groups with the following objectives: defining the professional objectives pursued by the direct beneficiaries (students); identifying the main difficulties they encountered at academic level; formulating recommendations on how to reduce the dropout rate.

The focus groups were attended by freshman students (majors: Mathematics, Informatics, Pedagogy, Primary and Pre-school Education, Public Administration) and seniors (majoring in Romanian Language and Literature - English Language and Literature, English Language and Literature - French Language and Literature, Mathematics, Chemistry, Informatics).

Responses given by participants allowed the following conclusions to be drawn:

a) *concerning the objectives pursued in terms of professional development, most of the participants in the focus group mentioned:*

- working in the field they majored in;
- getting high salaries;
- easy access on the labour market, even if payment is low;
- starting up/ developing own businesses (ex. Translation Agencies, Language Centres, Kindergartens, Afterschool programs, etc.);
- accessing scholarships/ professional development grants in the European space followed by a job abroad.

b) *among the academic and personal difficulties students faced we can mention:*

- insufficient financial resources to support the costs of attending paid undergraduate study program;
- withdrawal of family's financial support;
- assuming new roles, family responsibilities that negatively affect the achievement of academic responsibilities;
- the inconsistency between the competences held by students and those required in various study subjects;
- the courses integrated in the curricula fail to satisfy students' needs and knowledge interests;
- the lack of compatibility between school schedules and work schedules (for those who are employed);
- teachers' increased exigency level during evaluation, resulting in a low graduation rate.

c) *achieving professional objectives is significantly hampered by both academic difficulties and the dynamics of the labour market, and by the constantly changing requirements of the labour market;* focus group participants consider that there is a significant gap between their professional aspirations and labour market demand, but they are striving to reconcile the two plans;

d) *few of the respondents stated that they had taken into account the option of dropping out of their university study programs;* however, those who responded positively to the question "So far, have you thought of dropping out of the university programs you are currently attending" mentioned as the main causes:

- the impossibility of supporting the financial costs;
- awareness of the low absorption rate of students of different majors on the labour market;
- failure to pass exams on a large number of subjects listed in their curricula;
- family withdrawing their moral and material support;
- the impossibility of attending courses/ seminars as a result of their integration on the labour market.

These add to: the lack of motivation for learning/ professional development; the fairly narrow horizon of professional expectations.

e) *among the measures that can be taken at academic level so as to decrease the dropout rate, the participants in the focus groups mentioned:*

- counselling candidates at the time of their enrolment into university studies in order to formulate realistic career choices;
 - harmonizing university studies programs with the demands of the labour market;
 - providing financial support to students in difficulty; increasing scholarship amounts;
 - facilitating the student – labour market relationship by attracting employers to recruit staff from the graduate students of the undergraduate studies.
- f) *as regards the arguments used to try and persuade colleagues not to abandon their studies, the interviewees mentioned:*
- the long-term benefits of obtaining a bachelor's degree, taking into account the frequent changes in the labour market,
 - the possibility of valorising the skills obtained following their major in other fields of activity than those corresponding to the respective major;
 - easiness in securing a job, even if it does not match their level of education

The focus group data was the starting point in creating cognitive, socio-emotional, motivational and meta-cognitive support measures for students to take into account in the learning process, in order to promote academic success. We therefore appreciate as opportune a series of activities such as:

- developing institutional integration programs, focusing on educational orientation and providing information on the financing plan;
- providing financial assistance for university enrolment, developing support networks;
- offering individual consultations, additional courses, remedial sessions, pedagogical programs and indirect interventions of the faculty;
- organizing workshops, conferences, experience exchanges between students who belong to support networks or support centres;
- improving the quality of workplace training strategies and a better use of information and communication technologies;
- early identification of students at risk of dropping out.

5. In lieu of conclusions

An effective attempt to stop/ diminish the phenomenon of university dropout can only be designed by taking into account a mix of factors, intertwining and interacting, their effects being felt at an individual, institutional and social level. Thus, a potential predictive element is the type of educational path correlated with the way the decision was taken on university studies. If the students are recruited from among good and very good pupils, we can expect that the option to attend a University education program to be perceived as a natural continuation of their school evolution. In their case, problems arise if their school orientation was deficient, choosing a university/ major at the last moment and with many hesitations, without previous knowledge of the disciplines to be studied or the professional outlets. If the schooling was chaotic, with breaks and pendulums between several educational institutions, then the decision to enrol into university studies is likely to be the result of thoughts and tips gathered from family, teachers, counsellors. Although better informed, the choices of these young people seem risky, based on the representations they have built in relation to a discipline or even to the school institution.

In this context, school orientation seems to be an important factor favouring the early dropout. But it cannot be isolated and considered to be the only one responsible for producing this phenomenon, but it is important to follow the whole path to understand whether it is a sudden or a gradual drop out.

Learning methods and techniques specific to higher education are also a key element of academic success/ failure. Thus, in order to succeed, students have to understand the code of intellectual work, crystallized in a set of often informal and implicit rules, being able to identify the practical aspects of the tasks, to transform knowledge into skills. The difficulties encountered during their academic activity

determine some to quickly abandon their tasks, and others to work intensively but inefficiently. Discouraged by the first failure, many find the resources, the motivation to move forward, choosing the easiest way for them, dropping out of an educational system that they do not understand and which they do not think they can handle.

Out-of-school activities are often perceived as activities competing with students, creating prerequisites for dropping out. Many times, young people are involved in sports, cultural, or work activities, which makes study time drop significantly. The employment of a growing number of students may be the expression of both pressing financial needs and a desire for autonomy and independence in their relationship with their parents. At the same time, employment is seen as an opportunity in terms of familiarizing with the demands of the labour market and gaining professional experience. It also involves many dropouts or disillusionments education-wise, culminating in early academic dropout either at the decision of the individual or determined by institutional constraints.

Faced with an increasing dropout rate, the higher education institution is forced to develop a global strategy to stimulate academic success based on a series of recommendations: ensuring the quality of educational services and a framework tailored to student's needs, but also to the objectives of training programs; taking institutional responsibility for academic success, reflected in carrying out monitoring, counselling, mentoring activities and creating institutional structures aimed at the social and academic integration of students; developing a set of flexible and accessible working tools covering the main areas of academic success, focusing on developing students' autonomy; formulating key indicators for academic success and promoting them to help potential students make the right study choices.

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The negative impact of family dysfunctions on the child

Corina Iurea *

Educational Sciences Department, Petroleum-Gas University, Bd. Bucuresti, 39, Ploiesti, 100680, Romania

Abstract

The family environment is essential for the child and for everything that pertains to their training and development. Any family dysfunction has a negative impact on the harmonious development of the child. Unfortunately, there are very few parents who realize this and do something about it. Consequently, when the family suffers from these imbalances, in the life of the child may occur: anxiety, school failure, difficult personality, social inadequacy, emotional and affective balance disorders, etc.

Keywords: family dysfunctions; anxiety; anxious parents; anxious children.

1. Introduction

We live in a "fast-forward" society where we, as adults, feel that we are no longer capable, or that there is no more time to achieve our childhood dreams. This is reflected in the future of our children, in the future of the new society, and slowly but, alas, certainly, we are heading towards a world, a nation lacking willpower, a world that no longer fights for tomorrow, but only for making through the day.

If we talk about education, well, family education is an essential way of achieving informal education and it manifests informal education's main characteristics: it is carried out in a non-systematic manner, through life experiences lived in a direct, concrete way; it is vaguely manifested in the conduct of individuals and groups, it impregnates the personality with its specificity or by the full and continuous implicit influence.

At the same time, family, as a social institution, faces socio-economic challenges that have led to the emergence of social phenomena with a direct impact on the child's education in the family: increased divorce rate, increasing the number of single parent families, consensual couples, increased incidence of domestic violence, family vices that have a major impact on child development, increased number of socio-economically disadvantaged families, increased number of parents going abroad to work, etc.

Considering all this, we can say that family is a defining element in child's development, either psychologically or intellectually. Education has come to be a 'luxury' for the child, one that few parents 'afford' to use. Having a decisive influence on shaping the future individual of society, fully aware of the rights and duties they have in this capacity, the function of the family is achieved over a long period of time during which the child learns the content and the meaning of moral duty. It is family that contributes to shaping and developing personality, allowing the internalization of moral exigencies and norms.

With the changes in family composition, the roles of the family, their content, as well as the quality of the interactions between their members change. In this situation, family as a whole disorganizes, its performances become minimal, and its climate

* Corresponding author.
E-mail address: corinaiurea@yahoo.com

deteriorates, exerting the negative influences on its members. Such a family, lacking normal functionality, is a disorganized family, a family in 'free fall'. Its dysfunctions appear even more clearly in divorce situations, when marriage fails, where the parting of spouses generates dire, sometimes dramatic, consequences on the family as a whole and especially on children.

2. Anxious children mean anxious parents

The myth that kids have no worries can be nothing but false. Every child experiences the situations they go through in different ways, so they behave differently and consistently with their psychological development.

Much of the concern is family-centred, especially in the case of families whose parents are quarrelling with each other. Schooling, exams and being bullied by colleagues also make children anxious. Adolescents are often worried and uncertain about their outward appearance. Adults often do not realize how concerned their children are about things they do not understand. A child whose parents are separated, whose father is sent to prison or whose mother is seriously ill, can blame himself. It's completely irrational, according to the parents' standards, but such things happen every day. The child can tell himself, in the heat of an argument between parents that he wishes they both disappear and die. If one of the parents actually leaves afterwards, the child is sure he is guilty and can become really anxious (Eckersleyd, 2005, p.12)

The main worries affecting children are 'family breakup', family illness, school exams, very high academic expectations. All these worries are most often aggravated by the child's lack of power.

Some children react to different stressful situations just like adults, with symptoms such as insomnia or irritability, others, however, in case they are worried, act in a reprehensible manner. An adult in worrying circumstances has several alternatives to escape, but children and young people have far fewer options at their disposal. For example, when a break up occurs, an adult can leave, change jobs, even change home; for a child, when parents break up or the whole family moves, they have the feeling that there is nothing left to do in this regard and that life deals blow after blow. This feeling causes them to lock themselves in, refuse to communicate with anyone, deny the presence of anyone near them (see Nuță, 2009)

When there are problems of any kind, it is very important for parents to have the courage to tell children what is happening according to their level of understanding. Parents often assume that their own children are not aware of what is happening within the family; that they do not perceive tensions between partners, but this is a most erroneous assumption. Children, even small ones, notice much more than an adult can imagine. They feel when something does not go the way it should, when something is wrong, but they have no clue what the outcome will be, they do not know how to behave or how to prepare for what will follow. This creates anxiety. This is where the inappropriate behaviour of the child starts.

Family problems, school-related worries, issues with friends or extracurricular activities can also lead to anxieties and associated conditions such as refusal to go to school, social phobias, and, in extreme cases, self-mutilation, including anorexia and bulimia (Eckersleyd, 2005, p.17).

Often parents like to think that they have a very good relationship with their children, and that what goes on in the family (between the two spouses) has no impact on it. So they expect any problem related to any anxiety condition be brought before them, which is why the statistics on anxious children and suicide pacts between adolescents are very disturbing. Overall, children are conservative and are often frightened by any change in their lives. Even the smallest changes in daily routine can cause concern, as well as major changes such as the appearance of a baby in the family, a change of home or a family crisis such as a sickness or the separation of parents. Tensions or quarrels within the family can have a negative effect even on very young children, resulting in irritability, crying, attention-seeking behaviour and general mischievous behaviour. Older children who are anxious can revert to

behaviours that might be expected from younger children, such as rebellious and confrontational behaviour.

Children, like adults, are individualities, and some, naturally, are more confident and extraverted than others. Many children, from the youngest to the teenage, go through 'bouts/ phases' of anxiety and overcome them without any problem (the youngsters often go through powerful emotional experiences, such as fear or anger without understanding them or knowing how to deal with them).

3. Anxiety

According to several psychologists, there are three main signs that signal anxiety:

- Worries are very intense. If the child seems terrified, crying out loud, he has tense body reactions (he trembles, vomits, he has spasms, turns blue, faints, etc.), loses sleep or has nightmares, we can say he has intense physical reactions. Is it necessary for parents to be mindful of his or her thoughts: are they normal fears or are they linked to death, accidents, catastrophes and serious dangers? And of course, how tranquillity is achieved after an episode of anxiety has to be noted: does the child recover easily or does he stay anxious for a long time? The intensity of worries is the first sign that the little one suffers from an anxiety disorder.

- Concerns are paralyzing. Usually worries help the individual mobilize and gather their forces. When they exceed certain intensity, however, they make it difficult for the individual to make any plans. Worries are paralyzing if, because of them, the child no longer carries out ordinary activities, or his life changes to the worst. For example, because of the fear of dogs the child no longer goes on the street, or because he is crying at the prospect of being separated from his parents he avoids kindergarten. The higher the degree of impairment of normal life, the greater the chances of him having an anxiety disorder.

- Worries are not anchored in reality. 'Healthy' worries refer to things that really have a great chance of happening. It is natural for a dog bitten child to fear dogs, but it is not natural for him not to leave the house for fear of the dogs, although he has never seen anyone to be bitten. It is also normal to fear monsters if they have often been threatened they come to kidnap him, but it is not normal to be terrified when he speaks of a monster if nobody ever scared him on this subject. The more fears are out of touch with reality and appear 'out of the blue', the greater the chances for him to have an anxiety disorder.

Anxiety can also involve a genetic component. There are situations where parents, if they worry a lot, they can instil in their children the idea that the world is a scary, frightening place. To avoid these situations, the most important thing a parent can do is to provide the child with a correct education that will ensure they grow up feeling safe and self-confident, regardless of the character or temperament of the parent.

"The two things the majority of anxious children need the most are security and trust, often understood as self-respect. Most troubled children, anxious, or even delinquent lack, one of these factors or even both (Eckersleyd, 2005, p.26). The parent in this situation must display certain attitudes towards his child, regardless of the age of that child. First, a parent's primary duty is to provide the child with a loving family life, to provide him with a family climate that is conducive to the feeling of safety, help him learn behavioural rules and cultivate his self-esteem.

Observing some rules of conduct helps the child feel safe, so discipline is a valuable way to help them. By discipline I do not refer to harshness, violence or inappropriate language, but to the clear transmission of what is considered acceptable and unacceptable behaviour. It is also very important for these rules to be respected by both parents, as there are two risks: either inside the child there is confusion in the perception of what is allowed and what is not, or there could be flattery from the child to be granted exceptions. All these risks expose children to becoming anxious (see Mitrofan & Vasile, 2007).

One of the most difficult dilemmas parents face is finding a balance between child safety and ensuring a favourable climate to developing their self-confidence and cultivating strategies to help them cope with the world they grow up in.

As I said above, children are prone to anxiety when the family enters a crisis, when something does not work as normal within it. These situations may be: separation of parents, family member falling ill, death in the family, abuse, etc.

Separation is at the top of the list when we discuss the causes behind child anxiety. Shock, anxiety, pain, anger, aggressiveness - the whole range of emotions that adults experience when trying to cope with an entirely unwanted change - can also affect children. Generally, no matter how unsatisfactory the relationship between parents, how many scandals occur in the family, children do not want their parents to be separated because this is the only family life they know. Children often blame themselves for one of their parents leaving or they feel insecure, thinking they can be abandoned as well by the other parent, in whose care they remained. Divorce is a relief for the child only if one of the parents was particularly violent and abused him, otherwise the separation is a great suffering for the child.

Serious illnesses in the family or the illness of a very close friend are terrible situations for children. Just like separation and divorce, this situation threatens the safety of their lives. Children are sensitive to the atmosphere around them, and if they do not know what's going on, they can imagine something far worse than the reality. No matter how hard it is, it is best for the little ones to be kept up to date with what's going on. As with other family crises, what a parent should tell children depends on circumstances, age and maturity. Children react in different ways to the loss of a person they love, as is the case with parents. For any child, the concept of finality is hard to accept, so he may not understand why one parent or close family will never come home again. Cruse Bereavement Care recommends adults near children who have suffered a loss to tell them the truth, highlighting that what is actually going on in a child's imagination can make him feel more frightened and more anxious than reality.

Children who have been victims of sexual abuse manifest all symptoms of anxiety such as insomnia, nightmares, and behavioural changes. They may also start having sexually inappropriate behaviour and experience symptoms such as discomfort or pain in the genital areas, or fear to be left alone with certain people. It is important that in this case the parent provide the child with support, listen to him, show him that he understands him, and resort to specialized help in the field such as therapists, psychologists.

In conclusion, when talking about anxiety, there is usually reference to a state of tension, such as when a person feels in danger. This condition is accompanied by worries, fear, negative thoughts, and body tension. Anxiety disrupts mood and produces a state of emotional sickness.

4. Conclusion

Being part of a committed relationship, either married or unmarried, involves both our manifestation and our development as human beings. We are challenged, as Diana Vasile says in her work, on the many levels of our psyche: our feelings, conviction and beliefs, from the most superficial to the deepest, as well as our behaviours (see Vasile, 2007). In a committed relationship we discover and learn what love is, what intimacy with another person is, what forgiveness, tolerance, trust are, but we also learn how to manifest the negative emotions that our body experiences: rage, disgust, frustration, anger, hate, etc. Because of the many negative factors involved in the couple's relationship, families have become increasingly disorganized, riddled by uncertainty and obligativity.

If in the past family transmitted values, behaviour patterns as fair and good as possible, it laid the foundation of an education for the next generations, now everything seems to be at the opposite end. There are very few those who still know respect, who put emphasis on what a family really means.

Most people's excuse is that society is constantly changing, so family is no longer what it used to be, that man is bound to adapt to this change regardless of consequences. Thus, the dysfunctions that occur in a couple, such as the physical/sexual ones, those caused by the influence of the extended family, the entourage,

vices, the influence of the media, are only a part of the problems that cause the breakdown or the incompatibility between the two partners involved in a relationship.

But things do not stop there. The family environment is essential for the child and for everything that means his training and development. Any family dysfunction has a negative impact on the harmonious development of the child.

This negative impact can cause real imbalances in the life of the little ones; sometimes the imbalance improves, other times it worsens; all depends on the parent's decision to resolve the situation.

I recommend that those involved in a committed relationship, be it marriage or not, project their future with their partner, observe how life with the chosen person would be, and if they are not satisfied with what they see then look for a solution to solve the problems they observed. It is much easier to solve a problem in its early stages than when it gets worse, and the consequences are sometimes devastating. And to those who have children, I suggest they observe their children's behaviour, as it says everything about how that family works.

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The influence of the family life on school failure

Cristian Vasile*

Petroleum Gas University of Ploiesti, Bd. Bucuresti, nr, 39, Ploiesti, 100680, Romania

Abstract

Academic performance and school failure are two major aspects discussed within the educational environment. Usually school failure is not studied often comparing to academic performance. Still school failure is a fact especially in countries having issues in the educational system.

The paper analyzes family factors which could influence school failure in 70 primary school students. Even the school dropout is not so often met in primary school, specific factors which should be considered as triggers for later failure can be found. Family structure, economic conditions, culture, school environment, teacher style, bullying and others should be considered in school failure.

Keywords: school failure; academic performances; family; primary school.

1. Introduction

Within the academic environment usually there are two major directions observing the students' evolution: academic performance and school failure. Studies conducted on academic performance and its influencing factors seem to be more numerous than those addressing school failure. One of the reasons could be the cultural and economical differences between countries and mainly between different education systems.

The school failure and dropout problem is known as the "the one hundred factors problem" (Márquez-Vera et al., 2013) because of the numerous factors influencing the process (e.g. family, colleagues, teachers, economic situation etc.).

Regarding the academic performance some of the influencing factors which have been identified following different studies are: student institution integration, commitment to school, satisfaction with school, financial issues, career orientation, social support, and psychological health (McKenzie & Schweitzer, 2001). Other studies have been directed on the teacher-student relationship focusing on the affective dimension of it, indicating the empathy and warmth are associated with student outcomes (Roorda, 2012).

Studies focusing on educational factors have shown that poor school performance is associated with substance use. On the other hand some reports analyzed the socio-economic inequality as a major cause of differences in school performance (Gauffin et al., 2013).

Complementary, other research suggest that across two important domains of child functioning in the early grades of school, achievement and relationships with teachers, the quality of everyday classroom interactions in the form of instructional and emotional support moderates the risk of early school failure (Hamre & Pianta, 2005).

* Corresponding author.

E-mail address: clinical_psycho@yahoo.com

2. Methodology

2.1. Objective

The study has been focused on the influence of the family and school factors on primary school students in relation to school failure/dropout. As at this age the dropout is low, we investigated also the students' grades as potential indicators for later failure.

2.2. Participants

70 primary school students and 70 parents have been investigated using the data mining and questionnaire. Also the teachers were subjects of the research, providing different information. The area of the study was Prahova County, Romania.

2.3. Instrument

Two questionnaires specially designed for the study were applied: one to the parents and one to the teachers. Data mining was also used in order to analyze the factors involved.

2.4. Procedure and data analysis

Each questionnaire has been applied to the reference group (parents and teachers) and data have been processed. Also information related to students' grades, issues on major courses, family and school environment were gathered. The instruments aimed to identify the family situation, the material conditions of each family, if the parent helps your child to homework and in which manner, the difficulties encountered by pupils in learning, the time devoted to the study (parents questionnaire); identifying the difficulties encountered by students and their causes, identifying ways to prevent and combat school failure (teachers questionnaire).

3. Results

From the preliminary analysis, the families' structure consists of: 78% of the families have one child, 16% two children and the rest of 6% more than two children (fig. 1).

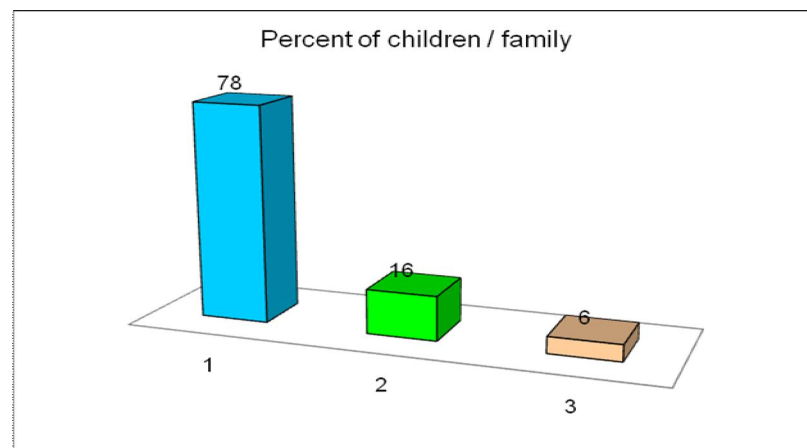


Fig. 1. No. of children/family

Another aspect analyzed referred to the presence of both parents, one of them or only grandparents in children's life: 65% of the students live with both parents, 16% with one parent and 6% with grandparents (fig. 2). Because of the economic situation some of the parents left their families in order to work abroad. They send money home periodically.

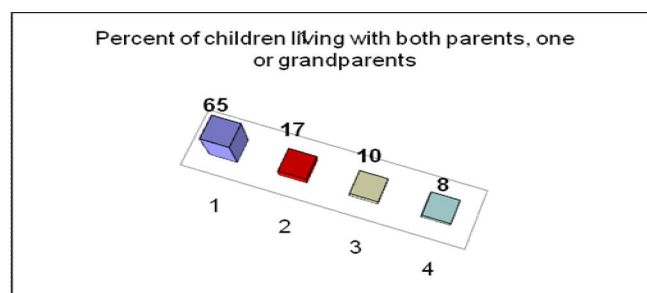


Fig. 2. Family structure

One of the specific issues affecting the academic performances is influenced by the quantity and quality of help given by the parents to the children with their homework. Thus 87% of the parents help their children with the homework, while 13% consider that their children don't need any help with the homework (fig. 3).

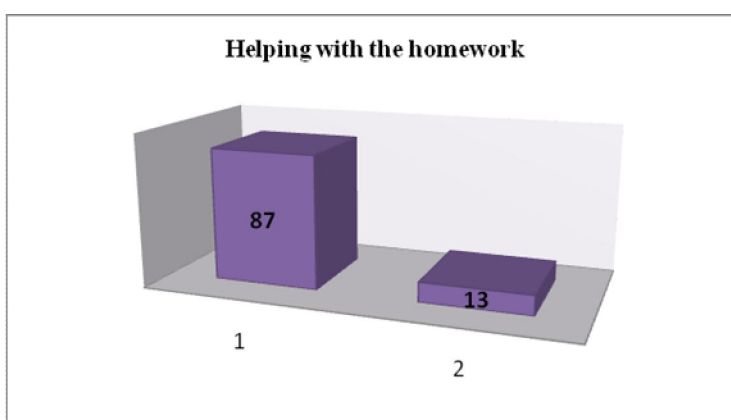


Fig. 3. Helping with the homework

The study time at home has also variations: 50% of the students prepare their homework between 1 and 2 hours, 30% for 2-3 hours, 12% below 1 hour and 8% over 3 hours (fig. 4).

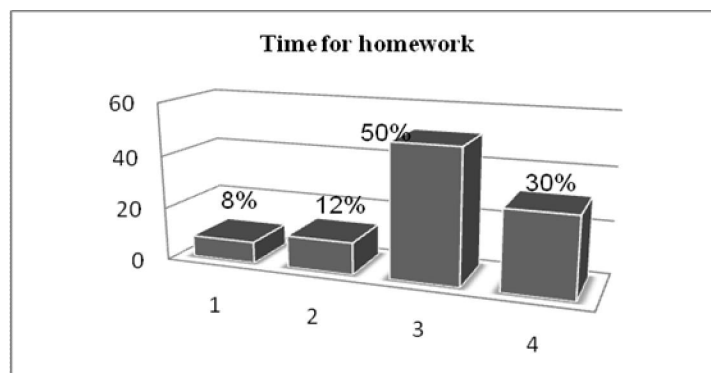


Fig. 4. Time spent for homework

An important aspect related to the academic performance and the time for homework consists of the time spent by the student watching at TV (fig. 5).

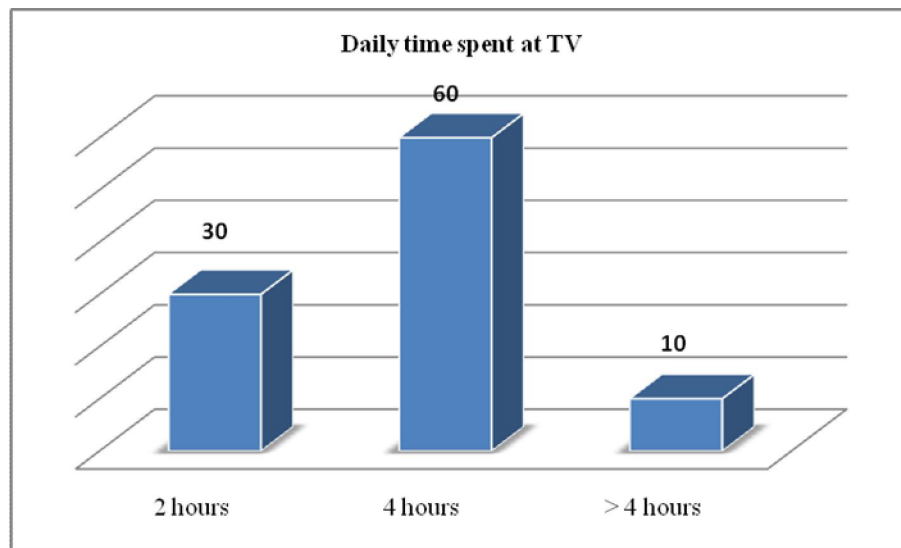


Fig. 5. Time watching TV

Recent studies have suggested that watching on TV, using computers, tablets and smartphone in excess could be linked to several modern disorders, such as ADHD and even some forms of autism. Moreover, watching too much time at the TV and using also in excess the modern devices will shorten the time for study, will lead to underdevelopment of direct social relations and could be a major cause for poor academic performances and failure.

4. Discussions

Even if the study was more extensive, we only discussed here some factors involved in the dynamics of school performances, and in school failure in some of the cases. As a conclusion we underline few important aspects related to academic performance:

1. The family structure is very important for the emotional life of the student and for his/her security feeling.
2. The help received at home for the school tasks is also of a major importance. Even the student has no issues with the homework, it's good for him to know that he can find help in family anytime.
3. The time spent for solving the school tasks should be appropriate from multiple views: the complexity of the task, the student efficiency (if he is tired, he cannot be efficient), the help received from his family, the emotional state of the student.
4. Using too much the TV and the gadgets (tablet, smartphone, computer) could lead to major problems related to academic performances, but also to real social life.

The present study cover only a view on multiple issues involved in academic performances and school failure. Other items will be analyzed and discussed in future extended studies (e.g., teacher's personality, school environment, colleagues – bullying, models and so on).

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The personalized intervention program: An educational tool for working with children with special educational needs (SEN)

Mirela-Ștefania Hrițcu^{a*}, Florentina-Ionela Lincă^a

^a*Doctoral School, University of Bucharest, Bucharest, Romania*

Abstract

The education of children with special educational needs has become a highly topical subject and has been increasingly debated due to some controversies. From this point of view, specialists have studied different methods, inclusion models and innovative educational strategies that could help children with special educational needs. This paper aims to underline the importance of using a personalized intervention program in the instructive-educational process of children with special educational needs, who struggle with mathematics learning.

Keywords: inclusive education; children with special educational needs; learning difficulties; personalized intervention program; inclusion.

1. Introduction

The education of children with special educational needs has become a highly topical subject and has been increasingly debated. The scholarly literature comprises many studies that promote inclusive education, the inclusion of these children with special educational needs.

Inclusive education is about how we develop and design our schools, classrooms, programs and activities so that all students learn and participate together.

This study aims to support those who are interested in promoting inclusive education, starting with the fundamental rights.

1.1. Conceptual delimitations

Inclusive education tackles the problematic of human diversity, of differences that exist between children. Thus, inclusive schools become more flexible in accepting all kinds of students, regardless of their differences, not only the typical, the usual ones, but also the different ones, regardless of their disability or their learning difficulty.

The education of children with special educational needs implies the individualization of school learning by an adapted curriculum and personalized intervention programs. The persons responsible for the education of these children are: the teacher, the support/ itinerant teacher, the school counselor and, last but not least, the family, the parents of these children with special educational needs.

Children with special educational needs (SEN) are, in Păunescu's terms (1997), those children whose special needs are educational and come from deficiencies that are mental, physical, sensory deficiency, language deficiency, socio-affective and behavioral or associated, regardless of their severity. In this category of children with SEN, we can include children who are in residential placement and those children/ students who have learning difficulties and/ or school adaptation.

* Corresponding author. Tel.: +40-740-694-642;
E-mail address: hritcumirelastefania@yahoo.com

Kirk (1962) claims that learning difficulties have to do with a delay in the emotional or behavioral development, and not with a mental delay or a delay caused by sensory deficiency or cultural and institutional factors (Kirk, 1962).

The support teacher plays an important role in the education of children with SEN. The support teacher is an education professional specialized in special psychopedagogy, who engages in activities of learning, stimulation, compensation and recovery, alongside other teachers who work with children with special educational needs integrated in mainstream schools (Popovici, 2007).

1.2. Statement of the problem

The past 10 years, the support teachers, working in mainstream schools from Botosani, have noticed an increased number of children with SEN, more precisely of children with learning difficulties, who were integrated in mainstream schools (Fig. 1). Thus, 30 support teachers were interviewed (In what measure the number of children with special educational needs has increased, especially children with learning difficulties, integrated in your mainstream schools?).

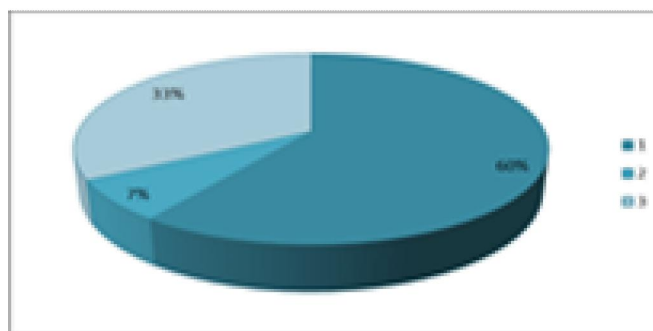


Fig. 1. Rise in number of children with special educational needs/ learning difficulties in mainstream schools.

In order to respond to the needs of children with learning difficulties, and to help them achieve their academic goals, the support teachers use Personalized Intervention Programs (PIP), which is an instrument that helps realize and apply the educational-therapeutic activity, used to improve intervention activities and to reach the goals specified in the individual service plan (focused on the development needs of the children/ students/ youngsters with special educational needs integrated in mainstream schools) (Popovici, 2007).

Thus, through PIP, the support teacher creates his intervention steps, his objectives, his intervention methods, his strategies and his didactic materials, the time needed to accomplish his goals and the priority order. In order to create this intervention plan, an interdisciplinary team is formed, consisting of a class teacher, a support teacher and also, as we mentioned before, the parents of the student with special educational needs. In this case, the family has the chance to get involved in the learning and compensation process of their child.

In our case, the intervention program was created in concordance with the mathematics difficulties encountered by a 4th grade student. The Personalized Intervention Program will be detailed below, and will include anamnesis, program's objectives and the intervention.

2. Methodology

2.1. Objective

Create a PIP for a child with mental deficiency, who also has learning difficulties in mathematics.

2.2. Participants

The Personalized Intervention Program addresses schoolchildren diagnosed with SEN, who study in a mainstream school.

2.3. Methods

In order to implement this type of personalized educational program, there will be used various methods: observation, case study, interview and analysis of the products of activity and documents.

The observation and case study methods will be used to identify the support needs and the special educational needs of the child with SEN. They will be applied by the class teacher, the support teacher and the psychotherapist.

The interview will be used by the psychotherapist to find out information that cannot be identified through other methods, information related to the behavior of the child with SEN when he does his homework.

The analysis of the products of activity and documents method will provide information about the school progress before and after implementing the program.

2.4. Procedure

The Personalized Intervention Program can be implemented by a team of specialists, formed by: a clinical psychologist and a psychiatrist (who will evaluate and help the child with SEN solve his problem), the class teacher and the support teacher (who will use pedagogical methods, adapted to the objectives of the program), a psychotherapist specialized in cognitive-behavioral therapy (which will use techniques for changing behavior, with an impact on the academic performance of the child with SEN).

After identifying the child with SEN, the class teacher, the support teacher and the psychotherapist will find the best pedagogical and psychotherapeutic methods to adapt the environment and the educational assignments to the needs of the child with SEN.

2.5. Data analysis

In this section, we propose a Personalized Intervention Plan (PIP), which may be based on data analysis.

Personalized intervention plan (PIP) has the following components and characteristics:

2.5.1. Anamnesis

People who work or interact with the child will be interviewed, in order to find out the following: the child's age; if he has a mental or sensorial handicap associated with learning difficulties; if the child is supervised while doing his homework and by whom; his grades; what the student thinks about mathematics, if he finds it difficult and if he understands his classwork; his behavior during class (he avoids his classwork passively, staring into space, especially when he is waiting for a new assignment or when there's an individual assignment; he's n% less focused on his assignment than his classmates and manifests motor and verbal behaviors that are not

linked to the assignment; the child finishes his assignment quicker than his classmates); if there's a specific pattern of his mistake, which can suggest that the student has a low academic performance due to inattention and to his lack of involvement in doing his assignment; if the child has calculation automatism and if he can self-monitor his strategies of calculation; the child's skills level, regarding addition, subtraction, multiplication and division.

2.5.2. Long term objectives

- check all information and see if there are other types of problems, for example, language delay, emotional problems, attention problems.
- investigate student's relationship with other students, his teacher, and also with his family members.
- change his attitude towards mathematics by changing his way of thinking; we want to find out the following: if the child finds it difficult to participate in this kind of activity (especially in resolving mathematics assignments), if his attention drops during his participation or if it is low from the beginning.
- reduce the difference between the child's academic performance and his classmates by: motivating the student to stay focused during his assignment, teaching him new strategies of resolving efficiently his assignments, developing new calculation automatisms, including the student in a compensation program where he can clarify the misunderstood information.
- involve parents and grandparents in his compensation program

2.5.3. Individual intervention plan – Steps

The determination of the therapeutic relation will be made through an informal discussion with the student about what he likes to do, the activities he enjoys doing without difficulty and the activities he dislikes, but must do. He will be asked about his relationship with his family members, his grandmother, his mother and his father, and, especially, with his class teacher and children his age. This discussion will take place at his home. After finding out about his difficulties with mathematics, the student will be explained why mathematics is useful on a daily basis.

There will also be a conversation with his parents, his class teacher and his grandparents concerning the time they can invest in getting involved in a program that will help compensate/ reduce the differences between the performance achievements of the child in question and his classmates. Thereby, we will know exactly how much time and who works with this child (Objective B).

The evaluation of the student will be made through a game, with the help of a colored board. Thus, the child will have to take attention tests in which, out of a number of concrete objects, one does not fit in (example: images with a table, a chair, a couch and a carrot are all put together, and the child will have to point out the mistake).

His language development will be also evaluated through tests that require defining some verbs or nouns, completing incomplete phrases, independent speeches – forming a correct agreement between subject and verb, forming developed sentences and grammatically correct phrases, imitating some actions and using mime and pantomime in accordance with the activity or emotions that were copied.

In order to establish his intelligence level, the child will have to take a few nonverbal intelligence tests, which measure his working memory, spatial orientation and divergent thinking (completing missing images and solving problems) – Objective A. His mathematical knowledge will also be tested by making the student participate in different games.

The intervention itself will be divided in different stages, detailed below.

The problem will be analyzed in accordance with the ABC behavioral method and also with the ABC cognitive method, which can be doubled by positive reinforcement, rewarding the newly adaptive behavior (he now focuses his attention during his assignments and performs it correctly), since the child could have a behavior problem (the student has a low performance due to his inattention and his

lack of involvement in assignments), but also a cognitive problem, because he may find it difficult to solve mathematics assignments (Objective C).

Thus, two programs will be simultaneously applied: one that focuses on developing calculation skills, forming calculation automatisms, and another that focuses on cognitive modification, by discovering the cognitive resources that we need in order to solve a specific type of problem (Objective C). The programs are detailed below.

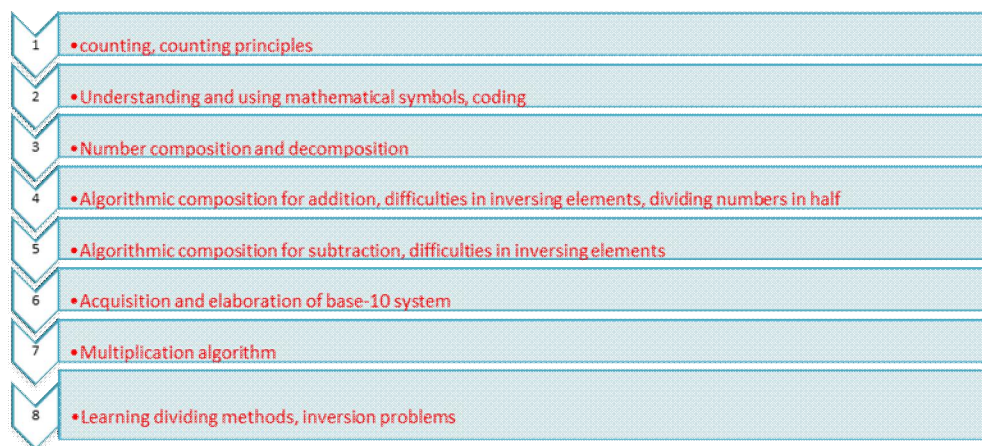


Fig.2. Modules of numeracy intervention program (Kaufmann, Handl and Thöny, 2003)

The mediated cognitive learning program, developed by Vianin (2011), aims to develop the metacognitive process in concrete school contexts. Two types of metacognitive knowledge: knowledge regarding working methods (Have I identified the problem's data? Do I have a precise working plan? Do I have enough time?), and knowledge regarding the nature of the assignment (Does the problem resemble other problems that I have solved in the past? In what lies its difficulty? What type of knowledge do I have to re-actualize in order to solve it?)

Based on these questions, the child has the possibility to become aware of the processes involved in solving school assignments. During this program, the student will receive a working sheet in accordance with his level and will be asked to solve it on his own. Meanwhile, the psychologist will observe him and will check the steps used by the student.

After the student finishes his assignment, they will discuss it together, favoring metacognition during the three stages of cognitive processing (reception stage, elaboration stage, answering stage).

Regarding mathematical problems, the author identifies three classes of problems (Vergnaud, 1987, Fayol, 1990, Ermel, 1993, apud Vianin, 2011):

transforming or changing problems – dynamic situations (George collects photographs with football players. He has 65 and gives to his little brother 14. How many does he have in the end?)

combination problems: two states are combined in order to get a third one – static situations (George has in his collection 65 photographs and 40 of them are with European sportsmen. How many photographs with sportsmen that aren't European does George have?)

comparison problems – “more/ less than” types of relationship – static situation (George has 65 photographs with football players and Paul has 46. How many more photographs than Paul does George have?).

Implementation will be done as follows: for each level of the Kaufmann, Handl, Thony (2003) program, we will apply the steps from the other program:

counting, counting principles (the child will receive a problem where he will be asked to use counting principles, and then he will direct his attention to his working method (Have I identified all the problem's data? Do I have a precise working plan? Do I have enough time?), and to his knowledge regarding the assignment's nature? (Does the problem resemble other problems that I have solved in the past? In what lies

its difficulty? What type of knowledge do I have to re-actualize in order to solve it?). Next, the child will receive working sheets, will be left alone in order to solve his assignment, and afterwards they will discuss together about the solutions the child found and he will be shown others by the psychologist).

We will start by using concrete-intuitive materials (big images that illustrate objects that the child can easily identify, images with objects that can be found close to the child), which will be followed by abstract materials (problems with text only and no images).

The child will have to solve problems similar to those solved in the previous experience, and he will have to use the algorithms he has learned, but he will also develop efficient calculation strategies and calculation automatism (With what does this problem resemble? Have I solved something similar in the past? How did I do it then and how should I do it now?).

These programs are doubled by rewarding the newly acquired behavior, adaptive (attention is focused on the assignment, participation in assignment), but also by the use of the control technique of the information processing (David, 2012), through which the child receives positive messages regarding his chance of success with finding solutions to different problems (Here you have a nice working sheet with some bears that would like you to help them weigh 5 kg of honey with a big jar of 7 kg and one of 1 kg. I'm sure you will know how to solve this problem, because it is very easy.).

The parents/ nanny/ grandmother, whoever is available, will help Sorin do his homework, based on the working sheets given by the psychologist (Objective E). They will insist on using mathematics – addition, subtraction – on a daily basis, without any working sheet. For example, when the nanny is cooking, she should take Sorin with her in the kitchen and ask him: Could you tell me how many vegetables there are on the table? If I put in the soup the carrot and the celery, how many vegetables there are still left on the table?). It is important for Sorin to see that mathematics is easy, that he can solve problems and he knows how to do it. In the first three months, Sorin will be rewarded after each problem that he solved correctly, then he will receive the reward at regular intervals and, afterwards, at irregular intervals. He will develop calculation automatisms and, at the same time, he will be motivated to do his assignments and focus his attention for a long period of time in order to accomplish his goals.

Moreover, if games will be used to help him do his school assignments, the child will associate the pleasure of playing with solving mathematical problems and, gradually, he will have an intrinsic motivation to solve problems. The child's teacher will adapt the elements of his problem, he/she will use concrete-intuitive materials until the child will compensate his deficit; afterwards, they will use abstract materials.

3. Results

The program that we proposed is based on the model of Kaufmann, Handl, & Thony (2003), which was implemented in a research about schoolchildren.

The results of Kaufmann, Handl, & Thony (2003) indicate that learning numeracy sequences and mental calculation (advanced calculation strategies; for example, decomposition problems) facilitate the application and the integration of other components of the numerical/ arithmetical knowledge. According to Kaufmann and collab. (2003), the effects of the habit formation program can be seen after a relatively short period of time of approximately 5 months, which is in concordance with other studies (Dowker, 2001).

Also, the success in learning mathematics will be provided, among other factors, by facilitating a positive experience regarding his connection with this discipline.

The child will receive problems that he can easily solve. Dunning (2001), according to Smith and Brummel (2013), affirms that the persons who perceive a certain situation or state as being hard to change are prone to give up when faced with a challenge, and not to persist in achieving his/ her goals.

Zerafa (2015), in her study, suggested that appropriate intervention can allow learners to succeed at acquiring the basic number concepts needed for mathematics learning. Additionally, she was noted that such intervention could greatly impact the affective domain of children, raising self-esteem and developing a more positive attitude to the learning of mathematics.

Three children (C1, C2, C3) with dyscalculia participated in this study. The children were between 7 and 11 years and they were selected after applying a test and an interview with parents of children.

Zerafa (2015) applied an intervention program that was based on the same principles as the program proposed by the authors of this paper.

By the end of the intervention phase post-assessments illustrated that all the children had made significant improvement in the numeracy components. Moreover, two out of three students, one in Grade 3 (C3) and the other in Grade 6 (C2), had increased their number age by six months and 18 months respectively.

Children's progress were summarized in the table below:

Table 1. Children's progress (Zerafa, 2015).

PROGRESS	OBSERVATION		
	C1	C2	C3
The children were less reliant on finger counting to work out even simple sums.			
The children were more efficient at working out simple addition and subtraction sums mentally after new strategies.	C1 specifically mentioned this new ability she gained by saying "but now I am much faster at working out sums mentally so I [with emphasis] can do them."		
Another important impact of the programme was that on the children's affective domain.	"this is a real lot of fun, can we do this again?"		"Oh no! Is the session over already?"
The children's self-confidence in mathematics was also increased. The children would comment on their achievements for each session helping them to see their strengths		Now, she write the numbers correctly.	He does not make mistakes.
in mathematics. They realised that they were not failures in all areas of mathematics as they had believed earlier.			
The focus placed on mathematics vocabulary. The children learnt the meaning of this vocabulary and also used it themselves correctly when they explain what they had covered during the previous session.			

We decided to put all results of this study in the table, because in this way they fallow more easily.

4. Discussions

In conclusion, the PIP is useful not only to identify the learning problems that the child encounters, but also to find suitable methods to solve them. We cannot intervene in a learning difficulty, if we do not have a comprehensive view of the problem.

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Aggression in primary school. Case study

Cristian Vasile*

Petroleum Gas University of Ploiesti, Bd. Bucuresti, nr, 39, Ploiesti, 100680, Romania

Abstract

Aggressiveness is commonplace in our society: in everyday life, in media, at work, and especially in schools. This problem is found mainly in western society and this highlights the large differences between the eastern and western cultural systems.

The paper presents a study on a sample of 30 students in primary school. Several factors of aggressiveness were investigated, such as: type of the aggression, place of the aggressiveness, origin and conflicting relationship of this psycho-social process.

Keywords: aggression; school; students; conflict.

1. Introduction

Antisocial behavior is an old problem in schools from the western society, European and American education being in top when aggression is discussed. In present the aggression encountered in schools involves mostly bullying, but occasionally other forms of aggression can be found. Bullying is more frequent among boys than girls and it is characterized by youngsters attacking deliberately their colleagues by repeatedly using physical, verbal, or indirect aggression (Pellegrini & Long, 2002).

The cause of aggressive behavior can be analyzed starting from different aspects:

- The physical and social changes of the children/youngsters.
- The internal need for domination. Dominance is seen as a social variable that orders individuals in terms of their access to resources (Dunbar, 1988).
- The social encouragement for competition and image in western society.

Various studies highlight the psychological problems of both parts involved in the act of bullying/aggression. Children who are involved in relational bullying also suffer from increased behaviour problems, including conduct problems (Wolke et al., 2000).

Dodge (1980) suggested that some children act aggressively because they attribute hostile intentions to others (hostile attribution of intent or hostile bias). Hostile bias may be a major part in the development of behavior problems in time. Moreover limited cognitive capacity is an element which possible causes hostile attribution (De Castro et al., 2002).

Aggressiveness has a wide range of forms and manifestations ranging from the most serious to discrete forms but with equally serious consequences. It can be classified according to several factors:

The means used to complete aggressive intentions:

- physical aggression (blows, injuries);
- verbal aggression (injuries, threats, irony, sarcasm, slander);
- affective aggression (intimidation, indifference, marginalization, boredom);
- direct aggression (which has direct effects on the aggrieved person);

* Corresponding author.

E-mail address: clinical_psycho@yahoo.com

- indirect aggressiveness (in cases where intermediaries can appear between the aggressor and the victim).

The form of manifestation:

- violent and non-violent aggression
- latent aggression (passivity, indifference, and denial of involvement - discrete forms but equally as serious as consequences);
- aggressive manifestation.

Objectives:

- aggressiveness with implicit or explicit purpose (obtaining benefits, material gain);
- aggression with the main purpose of injuring and even destroying the victim.

2. Methodology

2.1. Objective

The study tried to analyze several factors involved in aggression, including the time spent watching TV.

2.2. Participants

The main sample of the study was composed of 50 students in Prahova County, Romania, from primary school, 3-rd and 4-th grade, 15 girls and 15 boys. Parents and teachers were investigated too using questionnaires.

2.3. Instrument

Questionnaires have been used for the main sample (students) but also different questionnaires have been applied to teachers and to students' parents.

2.4. Procedure

The study samples have been informed about the research objective and instructed about the specific questionnaires. After the instruments were applied, data were collected together with other information (data mining) and processed.

3. Results

After the data processing from the students' questionnaire, several factors have been discussed.

All the students in the sample suffered from verbal aggression. The origin of this type of aggression was different though (figure 1).

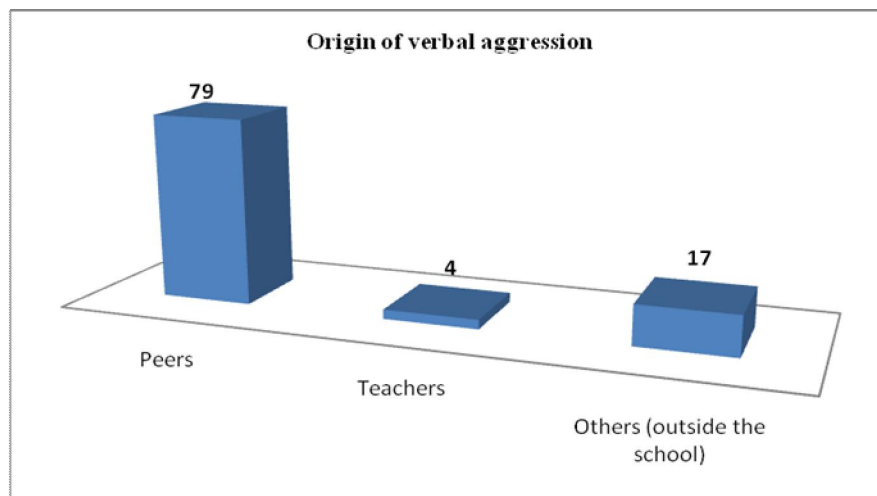


Fig. 1. Origin of verbal aggression

The percent of external aggression is worrying, as well as the percentage concerning the teacher use of aggressive words.

Another factor refers to the place where aggressiveness manifests (figure 2).

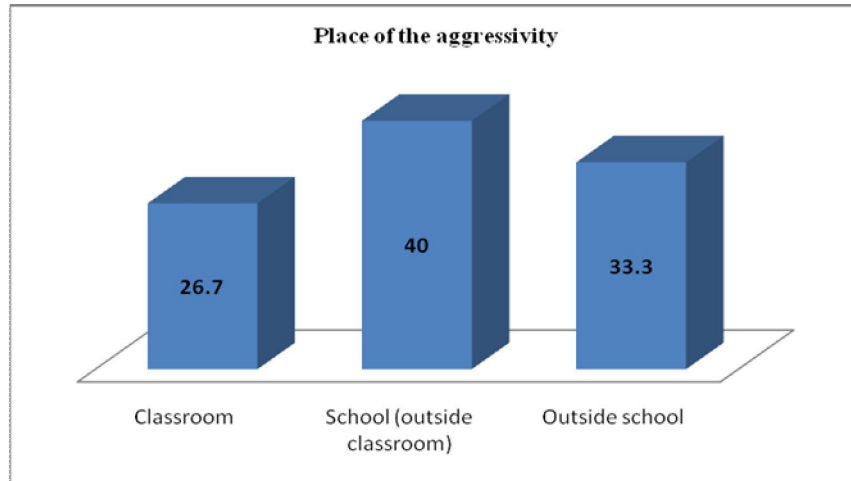


Fig. 2. Place of the aggressive behavior

As we can observe, 66.7% of the aggressive behavior is found within the school. This item should be used in the management of the violence, bullying and aggressivity in schools.

When confronted with aggression, students ask for help in many cases. The next item has investigated to whom the help request is directed (figure 3).

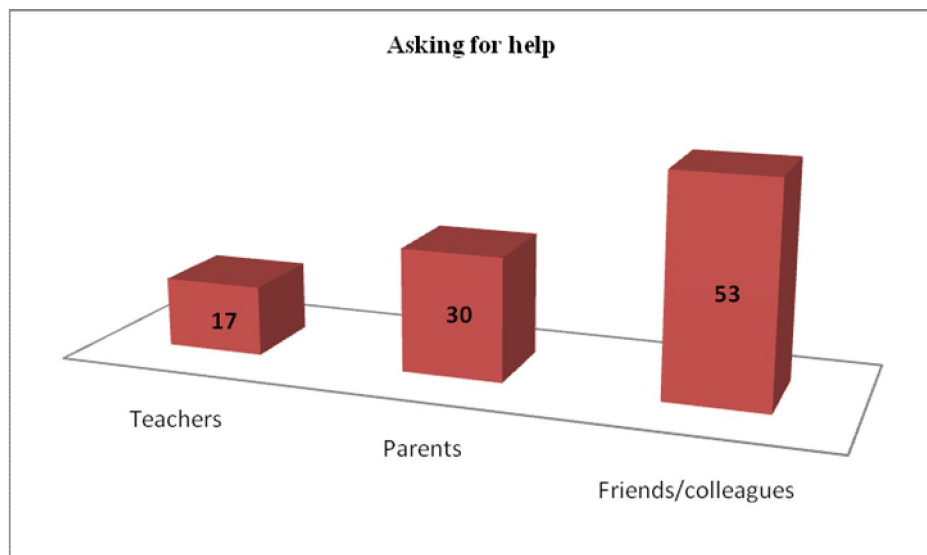


Fig. 3. To whom ask aggressed students for help?

In addition to the above discussed items, we found out that the students spend more than 3 hours/day watching TV and using the internet.

Last item discussed in this study refers to the types of conflicts in school (figure 4). As we can observe, there are also conflicts between teacher and student.

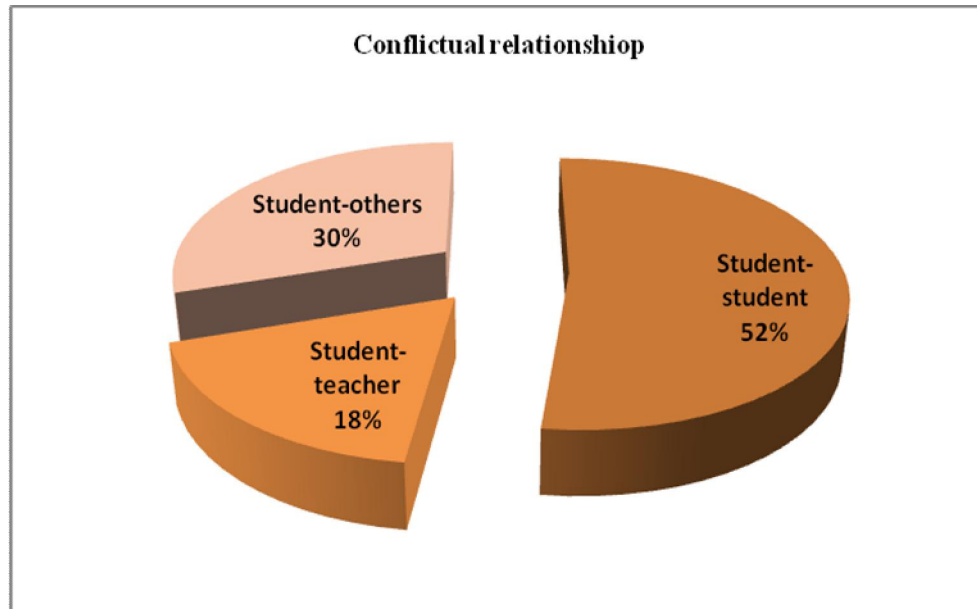


Fig. 4. Conflictual relationships in school

4. Discussions

The aggressive behavior in schools is an important issue in a period when aggression and conflicts are everywhere. Somehow the competition encouraged in classroom both by parents and teachers plays a major role in the aggressive behavior of the children.

Following the results of different studies, strategies of aggression management have been developed, yet the educational system cannot manage family factors or the factors influencing the students' behavior from outside school. In order to manage in an efficient way the disruptive behavior, several factors should be analyzed:

- Media – as long as the TV broadcastings and the internet are full of aggressive behaviors and models, the bullying in schools will continue.
- Family – most of the parents encourage the competition between their children and others' children in school and outside. The competition can easily degenerate into conflict and the aggressive behavior will appear.
- School – this environment should be secured and cooperation, altruism, benevolence should be encouraged.

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The learning portfolio – a successful instrument in counselling and guidance. A comparative approach

Angela Andrei^{a*}

^a*Institute of Educational Sciences, Stirbei-Voda, 37, Bucharest, 0101002, Romania*

Abstract

The present article explores the role and the main characteristics of the learning portfolio, as an instrument aiming to support students to acquire transversal competences by means of school curricula activities or extra-curricular activities. Examples of good practice on the use of learning portfolio in several European countries (Germany, United Kingdom, France, Finland, Luxembourg, Denmark, Romania) are presented. These examples were selected through documentary analysis of European and national reports, based on criteria, such as: aim, target group, the opportunity to integrate the learning portfolio in the activities of learning and evaluation carried-out in schools. Furthermore, the paper will emphasize the advantages and limits of the learning portfolio, as well as the role of teacher and school counsellor in using this instrument. Some relevant results obtained from a national research (2009) and from a national survey (2015), conducted both by the department of counselling of the Institute of Educational Sciences Romania are analysed. This approach will enable the proposal of relevant solutions on how the learning portfolio can be implemented in Romania in the context of the actual national education reform.

Keywords: learning portfolio; counselling and guidance; comparative approach; teachers; school counsellor.

1. Introduction

Counselling and guidance are important topics in the context of the actual Romanian education reform. The curricula of counselling and guidance play a crucial role in preparing students for educational and career decisions and their successful integration into the labour market and society. The focus of the new curricula is on developing and improving some transversal skills, as career management, defined as a “whole range of competences which provide structured ways for individuals and groups to gather, analyse, synthesise and organise self, educational and occupational information, as well as the skills to make and implement decisions and transitions” (ELGPN, 2009). The career management skills can help students become aware of what they already know and to build on that in self-reflective ways. This process can broaden and deepen learning through the acquisition of ‘metacognitive skills’ (i.e. self-awareness regarding learning, and capacity to reflect on it (King, 2004; Santrock, 2007, apud. Sultana, 2012).

The activities of guidance and counselling included in the school curricula for lower secondary education in Romania support students to identify their capacities, competences and interests; to develop their career management skills; to make informed and realistic educational, training and occupational decisions. Thus, students are encouraged to explore their own personality traits so that they begin to understand what interests them, as well as help them make informed decisions and manage their own way through the opportunities for further learning and/or work (Scoda, Andrei, 2016).

Various counseling and guidance activities in lower secondary education can support students to complete a learning portfolio individually or in groups. The

* Corresponding author. Tel.: +0-000-000-0000 ; fax: +0-000-000-0000
E-mail address: angela_andrei@ise.ro

process of preparing a learning portfolio will motivate students and develop their positive attitude towards further education and training and will support them to prepare a plan for future personal career development.

2. The learning portfolio

2.1. What is a learning portfolio?

‘A portfolio is designed to be a record of the competences (skills, knowledge and abilities) and experiences of an individual. It may list formal qualifications or include examples of work as well as recording training courses, work experience and non-work activities undertaken by the individual. The development of portfolios is an increasingly common career education activity in schools and universities’ (ELGPN, 2012).

The portfolio is an instrument specific for the constructivist approaches in education, containing the main achievements of a student and providing pertinent information to the teacher regarding the growth’s potential of the student. The learning portfolios aim to collect/ certify or self-evaluate and evaluate the learning experiences. They are classified based on the way they are constructed, as follows:

a). portfolios oriented on the learning process, which record the learning process, show the personal progress and the way of integrating knowledge and skills, facilitate the personal reflection on learning;

b). portfolios oriented on the learning outcomes: record only the final outcomes of learning and these are tools of certification and final evaluation (Țibu, Botnariuc, 2009).

Based on the support used, portfolios are paper-based or web-based. The portfolio approaches are either integrated into education and training programmes or provided in the context of outreach activities.

2.2. Examples of learning portfolios in European countries: Germany, United Kingdom, France, Finland, Luxembourg, Denmark, Romania

2.2.1. ProfilPASS, Germany

ProfilPASS, Germany for young people aims to review, document and assess informally acquired competences and record them in a competence portfolio. ProfilPASS also seeks to identify the individual’s educational, professional and life goals and to encourage their achievement. This instrument is available for young people aged 14 and was created to meet the specific needs of this group. It comprises two elements: the ProfilPASS folder itself and the tailored support to complete the process, which is provided by a counselling and guidance professional (Cedefop, 2010).

2.2.2. Personal Development Planning (PDP)

Personal Development Planning (PDP) is a practice developed in schools and universities in the UK in which pupils / students receive a structured framework from which to start to reflect on their own learning and their learning outcomes, to establish realistic goals and to draw their own personal, educational and career development (Țibu, Botnariuc, 2009).

2.2.3. The competence portfolio

The competence portfolio, implemented by the Maisons Familiales Rurales (rural family houses) in France, as part of their training schemes was launched to help young students and apprentices to find their first real job. The competence portfolio is intended for students aged from 16 to 20 attending vocational training and/or apprenticeship. A teacher from the school meets regularly with the apprentice and his trainer in the company, to assess the occupational skills and conduct of the apprentice. The competence portfolio helps the young people themselves by enabling them to

conceive, define and plan further steps, for example: to decide to seek guidance, to figure out what one can and wants to do with his/her life, or to identify the path that will lead directly to working life if the person is ready (Cedefop, 2011).

2.2.4. The Recreational activity study book, Finland

The Recreational activity study book, Finland offers young people the opportunity to identify and record the competences they have developed and what they have learned from their extra-curricular activities. The process is based on inputs from both the young person and an adult, who confirms the validity of the information, in place of a formal system of measuring or accrediting the young person's competences. The study book collects information about competences and learning gained in the following type of activities: regular participation in leisure activities; holding positions of trust and responsibility within NGOs; activities as a leader, trainer or coach; participation in a project; courses; international activities; workshop activities (apprenticeship); competitions; and other activities (Savisaari, 2005, apud.Cedefop, 2010).

2.2.5. Certification of competences

Certification of competences was developed in Luxembourg to enable young people to gain recognition for the work they have done in a youth organisation (i.e. a role of leadership, training or animation). The application for the certification of competences is based on an interview undertaken by a member of staff with the young person. The interview aims to identify the tasks they have undertaken and the competences they have developed. Thus, the young person is enabled to conduct self-evaluation with feedback from the staff member (Cedefop, 2010).

2.2.6. In Denmark

In Denmark, students develop a personal 'education book' similar to a portfolio in which they record their achievements, as well as their career interests and objectives (OECD, 2004, apud. Cedefop, 2010).

2.2.7. In Romania, the lifelong learning portfolio

In Romania, the lifelong learning portfolio was firstly mentioned in 2003. The Ministry of Education recommended that this document should be completed by schools on a specific template, containing the following aspects: personal information about the student, information about education, qualifications and competences acquired and in which context. In 2009, the lifelong learning portfolio is approached as a compulsory instrument containing the learning outcomes of the student at the end of lower secondary education and the importance of this instrument for career counselling and guidance is stated. A research of the Institute of Educational Sciences (2009) makes recommendations regarding the use of learning portfolio: broadening the area of use for students' self-evaluation, personal development, supporting the individual mobility for studies and work, counselling and guidance, for example, as a starting point for students' individual career plans (Țibu, Botnariuc, 2009).

During the academic year 2015/2016, a new curricula of Counselling and guidance for lower secondary education (grades 5th-8th) was prepared. The learning portfolio is seen as a process and as an outcome of learning in teachers' methodological suggestions of this new school subject.

2.3. Advantages and limits of learning portfolio

Among the advantages of learning portfolio, we mention the following:

a) students' self-reflection capacity

The portfolio is a tool that helps students to detail and gather proof of everything they have acquired, experienced and learned in formal or informal education contexts. It enables them to follow and to benchmark their occupational and personal route, to develop their thoughts, express them, generate ideas and reflect through time.

b) cooperation of all parties involved

To build a portfolio requires the actors involved to reflect about, analyse and describe their achievements. This takes the cooperation of all parties involved: the student or apprentice and a teacher, school counsellor, trainer, supervisor, mentor, advisor. In this way, teachers and parents have the opportunity to follow the academic and extra-curricular activities undertaken by students. The school counsellors can support the career decision-making process by analysing and discussing with students their career objectives and plans.

c) development and improvement of students' transversal competences

For instance, during the preparation of a learning portfolio students learn how to make a realistic assessment of their own skills and competences, develop an increased willingness to take on responsibility, improve their communication skills, and use the process to identify their career choices.

d) support for students' counseling and guidance process

The process of preparing a learning portfolio will involve students in deliberate activities of collecting information about themselves, education and occupations, exploring alternatives, planning their future studies and career and making realistic decisions.

The limits of the use of learning portfolio take into account the following facets:

a) difficulties in validating the acquisitions included in the learning portfolio

The portfolio involves a personal and subjective evaluation of competences, therefore it would be difficult to satisfy the formal evaluation criteria for validation of learning.

b) time and well-developed cognitive capacities

The process of self-reflection requires time and well-developed cognitive capacities, i.e. analysis, synthesis, introspection, etc. to select and record relevant learning outcomes in the portfolio.

c) insufficient preparation of teachers and school counsellors

Teachers and school counsellors require initial and continuous training in order to support students to identify their own strengths and weaknesses and to synthesize their main achievements in learning portfolios.

2.4. The role of teachers and school counselors in using learning portfolios

Research has shown that the process of identifying and assessing one's skills and competences works best with guidance from a third party. Individuals may not be aware of the competences and skills they have developed, through activities within the home or hobbies, for example, and experts can help to identify competences which the individual might have overlooked. School counsellor plays an important role in supporting students to develop a comprehensive, realistic summary of their competences and abilities, strengths and weaknesses (Cedefop, 2010).

The activities of guidance and counselling, as well as the development of students' career management skills (CMS) should be undertaken by skilled, well-trained and motivated staff. 42% of European teachers have a high or moderate level of need for professional development in career guidance, as shown in the Teaching and learning international survey (TALIS 2013; OECD, 2014). According to a survey conducted in 2015 by the Institute of Education Sciences Bucharest, the Romanian school counsellors need updated information and training on career counselling. Moreover, awareness of teachers, school managers and school counsellors should be raised on the importance of counselling and guidance activities in developing students' career management skills.

The same survey, undertaken at national level by the Institute of Educational Sciences (2015) showed that there are many teachers who have not participated in continuous training courses on how to implement the school curricula. Those who took part followed a 24 or 40-hours training course, considered insufficient for the efficient implementation of the school curricula (Tibu, Andrei, 2016).

In Romania, in the context of new education reform, teachers and school counsellors should be empowered to implement the new school curricula of Counselling and guidance (i.e. at level of primary education, lower secondary

education or vocational education and training) by acquiring and practicing new learning and evaluation methods, as learning portfolio. Thus, they will be better prepared to support students' personal, educational and career development.

3. Conclusions

The learning portfolio enables young people to reflect on their own activities and identify their strengths and weaknesses. Therefore, they have the opportunity to raise their aspirations, to identify appropriate learning opportunities and formulate future career' aims. The learning portfolio can effectively contribute to the process of students' counselling and guidance. Variants of portfolios which encourage students' self-reflection are used in several European countries. A learning portfolio which records the main achievements and accompanies students till they leave school can be particularly useful. This instrument is shared with teachers and parents, thus providing students with support in making sense of the learning developed along the way. The professional support of well-prepared teachers and school counsellors is essential for the successful implementation of the learning portfolio.

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Professional biography elements - landmark for career planning at the beginning of academic studies

Mihaela Suditu*

Petroleum-Gas University of Ploiesti, nr. 39 Bd. Bucuresti, Ploiesti, 100680, Romania

Abstract

By means of a restricted practical approach, the present micro study aims to emphasize the way in which the students base their decision/choice of training for a professional domain at the beginning of their university years. The present data and observations have been obtained via the use of two instruments/benchmarks as regards career planning, i.e.

“The Map of my Life” and the questionnaire, both methods being focused on professional accomplishment orientation.

The obtained data are collated and analytically tackled, their significance being summarized in the “conclusions” section.

Keywords: career planning; students; university education; orientation towards professional achievement.

1. Introduction

The pedagogic literature supports the idea that career orientation and professional adaptation are processes in a constant state of evolution, motion, configuration and reconfiguration, etc., as a result of the shifting nature of the concept of self-awareness. Deep, real, and effective knowledge of the self, in tandem with the proper ability to interpret career-related information, represent the foundation for building career goals. Moreover, a realistic and balanced perspective, obtained via the correct correlation between self-awareness and career-related information, gives consistency and substance to student career goals. Having several basic elements of the theory concerning the notion of career planning in mind (see Spencer, N & Joann H.B, 2015), some of the skills that lead to the effective realization of this task are listed below.

- “the ability of decision making;
- the ability to understand how work actually impacts personal life;
- the correct understanding of the permanent changes specific to certain feminine/masculine roles;
- skills necessary to achieve professional transitions” (p. 429).

With the above-mentioned skills in view, it must be stated that, first of all, the focus of the present analysis is on the adult group, i.e. young students, and, consequently, on the specific skills that they actually need in order to do an effective career planning. Of utmost importance in this context is the ability to have an objective, accurate, and vertical analysis of oneself. What does this entail? On the one hand, knowledge of oneself, i.e. “internal individual features – skills, values, interests, and personality traits,” and, on the other hand, “the ability to acknowledge but also realistically assess external individual needs – extra-professional demands, financial resources, family support, etc.” (idem., p. 430). A variety of other capabilities and equally important

* Corresponding author. Tel.:0040722287878
E-mail address: msuditu@yahoo.com

meta-capabilities must be added to the above-mentioned elements, as for example: the ability to manage crisis situations, interpersonal communication skills, decision-making capacity, decision-making styles with different consequences on the decisions taken, the ability to maintain composure in crisis and stressful situations, motivation, positivity, self confidence etc.

Equally important is the fact that the majority of graduates desire to become students after graduating high school. What was observed when attending college admission sessions and providing advice to potential future students was the fact that what matters most for the possible students when deciding whether to study at the university in question or not is aspiring to become a student as a means to an end; this is to say that the specializations themselves do not matter much (in some cases, of course!). The present observations overlap with the data from the literature that state that the aspiring trend towards a university for all is a contemporary idea which comes as a natural consequence of several substantial changes of society and the labour market. After a careful selection, the following are listed below (see Spencer, N & Joann H.B, 2015 p. 385, in Rosenbaum & Person, 2003, p. 252):

- “the increased requirements of employers in the labor market; regarding the need for employees with special skills and knowledge;
- obtaining pecuniary advantages for graduates of undergraduate studies;
- making college enrollment more accessible;
- the adoption on the part of universities of an open admission policy” (see Spencer, N & Joann H.B, 2015 p. 385).

This context underlines even more the need for career counselor activity in support of the career decisions of the students and in refining and promoting personal career goals so that they can attain their desired personal goals. In the context of the professional evolution of a student, there is an ever-increasing need for counseling, the intervention of the counselor entailing actually helping the students to acquire the necessary skills for this purpose, i.e. the identification of interests, their transposition into practical measures and, very importantly, how to connect interests to opportunities, how to assess their evolution against their career objectives, and the cultivation of the interest for thorough academic preparation (idem. p. 431).

2. Methodology

2.1. Participants, objectives, instruments of research

On a sample of 40 students at the onset of their university years (freshmen students), a tool specific to professional activity development was applied as a method and means for analysis; on the one hand, the instrument in question is extremely useful for the analysis because it allows the understanding of how the students took their decisions and finalized their choices, how they received support, in what values they believed at that time, what connections appeared between their inner selves and the characteristics of their desired professions, etc. On the other hand, the students must be able to understand for themselves the manner in which different events, outside people, etc. have influenced their lives.

2.2. Instrument of research

One of the tools used in the present study is called “the Map of my Life” (idem. 413). To continue, this tool relies on making a personal and, more important, professional inventory by any means necessary – drawing, collage, short story, illustration etc. – in order to assist students in discovering several aspects about themselves, and the events and people in their lives that have influenced their professional outlooks (idem. 413). The analysis also focused on how students see their professional future and evolution; with this objective in view, the task was completed by asking the students to formulate a career goal and to specify three practical ways that lead, in their opinion, to reaching the formulated objective. To supplement and cross-check the data, another research instrument was simultaneously used, namely

“My achievement orientation questionnaire” (see J. Dann & D. Dann, 2012, p. 203), a questionnaire that has been translated and adapted especially for this task. The questionnaire in question contains 14 questions, and the related answers can be ranked according to an intensity scale consisting of four stages: from 0 – never and all the way up to 4 – always. It is believed that the elaboration of the profile of the students as regards their achievement orientation is useful, on the one hand, since it reveals their self-esteem and self-confidence levels, both regarding their personal and social lives, and, on the other hand, their orientation towards achievement and success. It is important that each student be able to define their own success (how they conceive the notion of success).

3. Results, analysis, observations

The analysis of the data obtained was accomplished including several of the elements specific to the discipline of career planning (theoretically and richly described above), namely: the ability for self-discovery, decision-making capacity, how to link working-life and personal-life requirements, the ability to make professional transitions, etc. What information does the critical reading of the “maps” offer?

- it can be observed that a considerable percentage of students (30% of the students in the sample) decided to change their professional trajectory, the students in question being graduates of other faculties, in totally different areas of specialization.

- the reason for the decision to change their professional trajectories is tied in many cases to the realization of the incompatibilities between the actual requirements of the job and their individual dreams and aspirations. Briefly, their motivations revolve around explanations of the following type: “I didn’t fit in with the requirements of that profession,” “I realized that my place wasn’t there,” “I could no longer do it!,” “Bad luck” etc. Thus, elements of inconsistency in terms of career orientation can be observed, including: indecision and chance when it comes to choosing a specific occupation, and maybe too little concern for self-realization and a deep and critical analysis of oneself. The motivation of this second option is related to the “revelations” (as a result of experiences, time etc.) regarding the love of children, admiration for the nobility and mission of a teacher, preexisting models of childhood and youth times pertaining to their own teachers etc. These are important and solid career planning reasons and, hopefully, successful vectors for motivational/professional performance. At the same time, it is hoped that the answers were based on the genuine rationales and emotions of the students, and not just on “political correctness.”

- it is interesting to note that the decision to pursue a vocational profession is due to the examples received from their own teachers. The impact a role model has on a young person can thus be observed in their choice of profession as well as their need for identification with said model. These details, observed via the analysis of the applied professional biography tool, are also confirmed by the results obtained from the application of the second tool – “My achievement orientation questionnaire”. In a large proportion (60%), the students fall, by virtue of the overall obtained score, in the 29-42 range, which indicates, as the authors of the questionnaire state (see author, page), an orientation towards the maximization of the desired professional success and also a need for support, role models, etc. in order to inspire admiration in them and spur their drive for professional achievement.

- the most relevant factors when making their professional decisions are: family (most often mentioned), school (professional models inspired by teachers), friends, the Church, but also difficult situations and highlights of their lives, etc. According to the respondents, all the above-mentioned factors contributed to their orientation towards the vocational field. Furthermore, what is interesting to note is the fact that no respondent made their professional decision by themselves and had sufficient strength, determination, and self-confidence so as to be able to make their mind up by themselves and firmly stand by the decision.

- career planning also entails the ability to set goals for the future. Of interest is also the ability to detect types of action, means, resources, etc. in order to achieve their

professional goals. The observations subsequent to the analysis of the responses received lead to the conclusion that the objectives in question can be translated into two types of concern – some students are highly focused on graduating, while the other type of student is oriented towards fixed objectives pertaining to their evolution as teachers and strengthening their professional image. The following are generally seen as activities that make reaching their goals possible: working hard, being industrious, open to constant learning, flexible, ambitious, etc. By correlating the data from the “Map of my life” instrument with the high scores (a response range of 43-56) obtained at the “My achievement orientation questionnaire” tool, an underlying trend can be observed, namely: the strong desire of professional achievement and aspirations, and, even more interesting, a positive and confident perspective on the future. These scores also reveal – as demonstrated by the authors of the questionnaire – the ability to formulate goals for career achievement, reinforced by the determination to fulfill them.

4. Discussions

The observations and comments carefully formulated in the chapter dedicated to the presentation of the research data underlines the professional need of students to be advised in their various stages of becoming – middle-school, high-school, higher education, etc., as well as the establishing of a trajectory that leads to their realization as future professionals. From the analysis of the data provided by the applied professional biography of the students it can be observed that absolutely no respondent mentioned being advised by a school counselor, even in the final moments of their educational stages. In a dynamic society, with changes in terms of the interests and needs of the labor market, the path of students aspiring to a well-defined professional status must be clarified, reinforced, and guided via specific educational policies of the universities and their decision to adopt an open admissions system. More often than not, the actions of the students in this regard should be professionally counseled. The present micro study points out this reality and, even more so, the need to educate students so that they have a permanent concern for self-discovery, acquiring the skills that lead to intrapersonal intelligence, all the afore-mentioned elements leading them towards good decisions regarding their professional trajectories.

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Teaching translation classes in Higher Education. A case study

Mihaela Badea^{a*}, Diana Presadă^a

^a*Petroleum – Gas University of Ploiești, #39 Bdv. București, Ploiești, 100680, Romania*

Abstract

The present paper aims at identifying philology undergraduates' perceptions of the translation classes they attend during their practical courses. The starting point of this case study was the sudden change of the graduation examination structure, which does not include a translation task anymore. By means of a questionnaire, whose data are both quantitatively and qualitatively analyzed and discussed, the study tries to answer questions such as: to what extent do students still enjoy their translation classes, how useful are these classes for their future career as well as their opinions on the strategies used by the teachers during the classes they take part in.

Keywords: translation; strategies; benefits; drawbacks; undergraduates.

1. Introduction

Irrespective of the academic level, undergraduate or graduate students specializing in the study of English as a second language attend translation courses, which are a major component of the curriculum in Romanian universities. Although the teaching of translation has been a constant preoccupation of the Philology curriculum makers, the perspectives on the teaching of translation have varied in accordance with the translation theories evolving over the years. A dominant trend in the past, and even today in some translation training programs, sees translation as 'a branch of Applied Linguistics' (Snell-Hornby, 1992, p. 21) and consequently limits it to theoretical concepts and classroom activities that aim to develop students' English language skills by making them aware of the rules of the language system. As the focus is on the words and sentences, learners are taught to transfer the meaning from the source language to the target one paying attention particularly to grammar and lexical accuracy. Such a view of translation is rooted in the 'linguistically oriented school of translation' (Snell-Hornby, 1992, p. 21) that dominated the scene in the 1960s and 1970s, under the influence of Eugene Nida and his concept of 'dynamic' or 'functional equivalence'. In the light of this concept, the purpose of translation is to render the 'naturalness of expression' in the target language, which, as Depraetere (2011, p. 2) explains, means 'replacing the principle of foreignization by that of domestication'. In other words, the act of translating does not aim to preserve the values of the source language any longer, but to change them so as to make the foreign text readable for the readers of the target language. For Venuti (2012, p. 12), a domesticated translation follows the criterion of 'fluency' or 'easy readability by adhering to current usage, maintaining continuous syntax, fixing a precise meaning'.

* Corresponding author
E-mail address: mihaelagab@yahoo.com

As the author further explains, a fluent translation is 'immediately recognizable and intelligible' giving the reader the illusion that he/she may have 'unobstructed access to great thoughts, to what is present in the original' (2012, p. 14). He believes that the theories of domestication initiated by Nida imply a kind of 'ethnocentric violence' as inherent in the act of translation because 'the reconstitution of the foreign text' is performed 'in accordance with values, beliefs, and representations that preexist it in the translating language and culture, always configured in hierarchies of dominance and marginality' (2012, p. 18).

The broadening of the perspective from the sentence to textual features, from the language description to the language use and its sociocultural background laid the prerequisites to a pragmatic approach to translation in the 1980s and 1990s. Now translation theories point out the relationship between translation and its communicative context, showing 'the ways in which the social and cultural context impact on the end product' (Depraetere, 2012, p. 2). Venuti (2012) considers that by the end of the 1990s translation theories were influenced by two major contributions: one refers to Schleiermacher's method that pays attention to 'the linguistic and cultural differences of the source text' and the other to Berman's notion of translation ethics that 'respects cultural otherness by manifesting the foreignness of the source text in the translation' (2012, p. 2). Nevertheless, as the author states, the stress laid on the foreignizing translation does not imply that the principle of fluency required by the domesticated approach is abandoned, on the contrary it widens 'its boundaries beyond the restricted lexicon and syntax allowed to translators' (2012, p. 2). In other words, this principle is 'reinvented in innovative ways' as the foreignizing translator purpose is to 'create new conditions of readability' by expanding 'the range of translation practices' (Venuti, 2012). As Venuti shows, translation theory and practice has gained great impetus, especially beginning with 2000, due to the expansion of the literary and cultural studies, as well as of the sociological and even political trends in thinking (2013, p. 5). Being not only a linguistic activity but also a sociocultural one, the act of translation, according to the same author, involves a 'hermeneutic model' which reunites the text and its sociocultural context in an interpretative approach. As translation is an autonomous and interdisciplinary field of study, translation programs in higher education are required to equally develop linguistic, cultural and professional competences in students. In the context of 'the cosmopolitanism, globalization, and transnationalism' that characterize today's world translation has become 'a key practice of intercultural communication' (Venuti, 2017, p. 11).

As translation is an autonomous subject classes dedicated to it should develop specific knowledge that is connected with source language skills, target language skills, methodology of approaching a translation, and technical abilities, all leading to professional competence. To put it differently, 'the ultimate gain is to develop students' linguistic (and cultural) talent into the professional competence of an expert who, as a specialist in the fields of language, culture and communication, can work as a generalist in a great many areas where translation is required' (Snell-Hornby, 1992, p. 21).

2. Methodology

2.1. Objective

The purpose of the research is to find undergraduate students' perceptions of translation activities they participate in the English practical courses classes,

especially at present, when the final graduation examination does not include a written test anymore. The study aims at answering the following questions:

1. To what extent do students still appreciate translation classes?
2. Do teachers apply active learning strategies during translation classes?
3. Do students consider translation classes useful for their future profession?

2.2. Participants

The 42 participants in the study are final year students specializing in Romanian and English language and literature at the Petroleum – Gas University of Ploiesti who attend English practical courses, as a compulsory subject in the curriculum.

2.3. Instrument

The present study used as a research instrument a questionnaire that consisted of 10 items, out of which 4 were closed questions and 6 open questions. The participants' answers were analyzed from a quantitative and a qualitative point of view to get a proper answer to the questions that guided the research.

3. Data Analysis and Results

The respondents' answers provided some interesting opinions that could orient teachers in their activity in the future. An important aspect that should be emphasized from the very beginning is that, although translation is not a compulsory test during the graduation examination, students still like classes which include translation practice. As seen in Figure 1, a large majority of the students (76.19%) enjoy their translation classes which are part of the English practical courses.

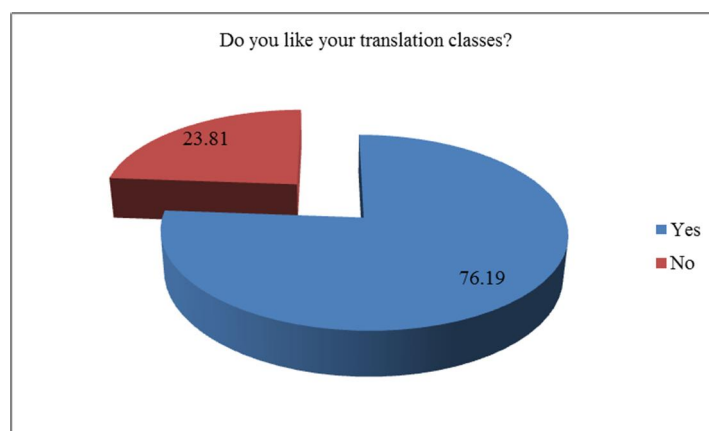


Figure 1. Students' views of translations classes

As to the answers given by the respondents regarding the teaching strategies used by teachers during the translations classes, most of them mentioned some of the traditional methods and techniques such as the explanation and the exercise. Only a low number of students specified some interactive activities based on group and pair work during which they were asked to perform brainstorming and problem solving tasks.

The following questions aimed at finding out information about the teaching aids generally used by teachers in translation classes. Surprisingly, all of the questioned

students mentioned only hand-outs containing texts to be translated and books to compare their products with authorized translations.

Regarding the gains of translation classes, according to students' opinions, the majority of them appreciate the fact that translations help them improve and enrich their vocabulary and grammar knowledge. It is noteworthy that most respondents have a linguistic view of translation, which proves that they are not totally aware of the socio-cultural gains of such activities.

Besides the benefits of translation classes, the questionnaire also aimed to find out what the drawbacks of such classes are in students' opinions. Some of the respondents admitted that the texts chosen by their teachers are too difficult for them to translate because they are above their level of knowledge. Others complained that such classes are boring because of two reasons: on the one hand they fail to participate in the class and to complete their assignment and on the other hand some teachers ignore weaker students preferring to work with better students. However, a low number of students did not find any drawbacks of such classes, being content with the teachers' teaching style.

In students' views, the solutions to these problems consisted in a better selection of texts, corresponding to their needs, interests and level of knowledge, as well as a more rigorous checking of their written assignments. Due to this fact they complained that the process of translation sometimes remains unclear and confusing because they do not fully understand the linguistic choices made by the teachers together with the other group mates.

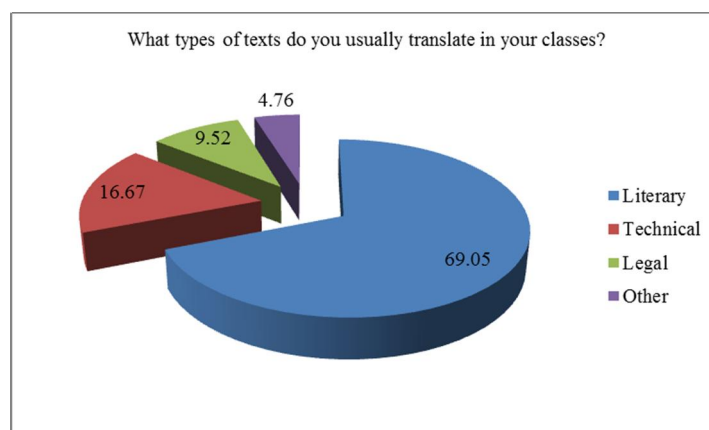


Figure 2. Types of translations

As far as the choice of the texts that are translated, a large majority of the students (69.05%) confirmed that literary translations are prevalent, which is in accordance with their field of study (Romanian and English language and literature). At the same time, 16.67% of the respondents signalled that technical translations are also present during their practical courses due to the fact that after graduation some of them may choose to work as translators in the oil companies of Ploiești, a town which is recognized as an important center of the oil industry in Romania.

The answers to the question referring to the types of translations they prefer doing revealed interesting points of view. Most of the students mentioned among their preferences contemporary literary texts, newspaper articles and other functional texts. It is interesting that students are aware of the opportunities offered by the labor market and they suggested doing more technical translations, especially in the field of oil and gas industry.

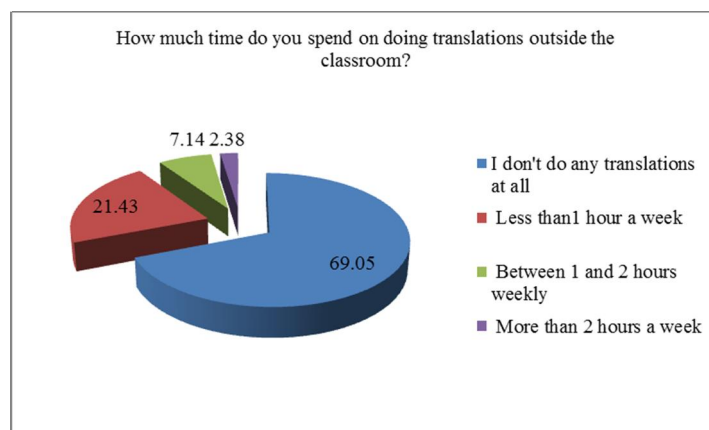


Figure 3. Time spent on translations outside the classroom

With regard to the question referring to the time students spend on doing translations outside the classroom (Figure 3), the answers they provided somehow contradict their interest confirmed by the data analyzed so far. Although they see translation practice as beneficial, when it comes to do extra-work, they admitted that they do not spend their free time on doing translations at all (69.05%). This attitude is also confirmed by the fact that only a small percentage of students (28.57%) do translation outside the classroom for maximum two hours a week, which may not be enough for acquiring solid translation skills.

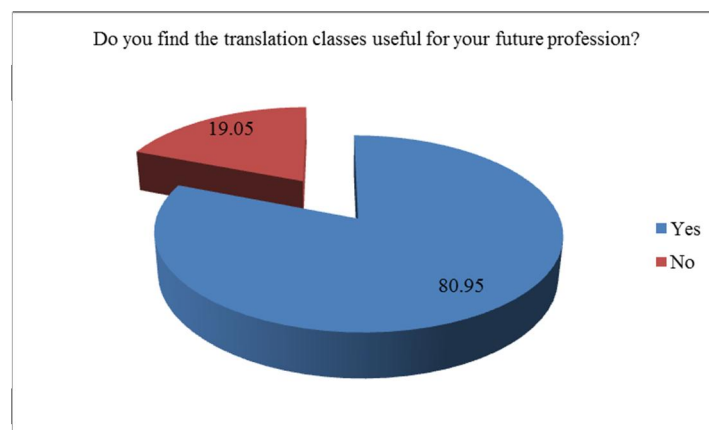


Figure 4. Usefulness of translation classes

The answers to the last question referring to the students' opinion about the usefulness of translation classes for their future career reinforce their positive attitude towards translation classes, a high number of the respondents (80.95%) considering that such classes provide them with the opportunity to develop their translation skills and knowledge both as future teachers and translators.

4. Conclusion

The conclusion that can be reached after analyzing and discussing the findings is that in spite of the change in the final examination structure, students still perceive translation classes as enjoyable and useful for future development. On the other hand, their suggestions regarding the strategies employed during the translation classes, the teaching aids and the types of texts they prefer doing should be taken into

consideration by instructors in order to improve the quality of the learning process during the translation classes. As a result, teachers who conduct translation classes should rethink the content and the methods used during their instructional activities by paying more attention to interactive learning and teaching strategies, as well as to their students' needs and interests by involving them in the choice of the translation texts and by providing them with permanent feedback on the performed tasks.

Since translation proves to be an interdisciplinary field that involves interpretation at multiple levels, all instructors should bear in mind that students' linguistic skills have to be completed by complex knowledge and cultural awareness, no matter the type of translation they do, literary or scientific.

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E-books as modern teaching aids

Al-Dulaimi Hassan Khlebus^a, Ecaterina Vrasmas^{a*}

^a*Univeristy of Bucharest, Faculty of Psychology and Educational Sciences, Bucharest, Romania*

Abstract

An eBook is a form of publishing in a digital medium and since reading is the basic component of most educational activities, it is necessary to reach all students, especially special need students and distance learning students. The digital books are considered the biggest change in the editing field, since Gutenberg, and the idea was introduced on the market as a digital document accessible on a computer in 1998.

Digital or electronic text offers options such as Text-to-Speech that provide users additional modalities for receiving the information, such as allowing readers to interact with the text by taking notes, marking, highlighting, searching, and even interacting with associated dictionaries. By using e-books as tools, instructors can expand the accessibility and ease of use both for themselves and their students.

In education, e-Books can have various impacts. First of all they can be used as learning aids by the students or as teaching aids by the teachers, for example electronic manuals. There are many advantages of the digital books, the most important one being the fact that the delivery is instant and they're always available, so they constitute an important resource that can at any time the learning process.

The content of the digital book is enriched with various multimedia elements, such as sound, video, animations, and in manuals this is an important aspect because all these elements can help the student better understand the content. They can also contain interactive tests, questionnaires, and simulations.

Of course, the e-books are an alternative to the traditional book, but they can also be used as complementary aids in modern teaching strategies and techniques.

Keywords: E-books; modern teaching aids

1. Introduction

Lately, due to the evolution of technology and emergence of new technologies, there have been several discussions on whether schools should integrate technology as teaching aids and what the role of technology in education is. Technology has always been used in education, starting from carving figures on rock walls to technological devices, such as laptops, mobile phones, electronic blackboards, e-books and many others. The importance of technology in education has remained constant in spite of the changes of the materials and the evolution of technology. The emergence of new technologies has helped shape the new ways in which people are communicating, and forming social constructs and according to recent research that these technologies are shaping the way we think, work and learn, especially for the youngest generations (Green & Hannon, 2007). This "transformation" has had various implications on education. ICT is starting to be very dominant in schools, and children and new generations of students are increasingly growing up with ICT and using technology in their daily lives, still teachers' use of ICT for teaching and learning continue to be a concern for educators, according to the study of Polly et al (2010). Their article uses the framework of technological pedagogical content knowledge (TPACK; Mishra & Koehler, 2006) to analyze findings across projects from the U.S. Department of Education's Preparing Tomorrow's Teachers to Use Technology (PT3) initiative. Approaches such as mentoring methods course faculty, teachers, and creating

* Corresponding author. Tel.: +0-000-000-0000 ; fax: +0-000-000-0000
E-mail address: author@institute.xxx

technology-rich instructional materials were associated with increases in preservice teachers' technological knowledge and their frequency of technology-rich instruction during field experiences. Lastly, the authors provide implications and directions for future analyses of technology integration efforts.

All teaching aids have the purpose to make lessons easier to learn, more interesting. They are usually chosen by the teacher, in terms of being useful to the context of the lesson. The teaching aids also have as objectives to enhance teacher's ability to make the process of teaching-learning more effective, to develop easy and understandable material, to create interest in the taught subject, to increase the attention of students and to communicate better. The focus of this paper will be on e-books and their role in education as teaching aids, also in the form of e-manuals or digital manuals for students. According to Cucos (2014), introducing digital textbooks in teaching raises some concerns, beyond the economic, sociological or educational policy. A change in learning media required an evaluation from the perspective of psychology of learning. Switching from the classic manual to the digital one is part of the broader trend of cultural digitization and virtualization, which I will further extend upon in the discussion and results section.

According to Cayley Reid (2017), the new literacies theory implies that teachers implement technology into their classrooms so that students can navigate through the 21st century. Researchers also believe that e-paper is potentially equal to printed paper in terms of optics, due to the customizable nature of the platform, meaning that for young students it would be a benefit to use e-books. The e-books impact on literacy will be analyzed according to the specialized literature. As the literature shows, eBooks are not only becoming widely accepted, but also embedded in students' expectations of core provision (SCONUL 2013). EBooks can be embedded in online programs or made available through virtual learning environments, however, the main beneficiaries of this change would be the visually impaired and print disabled students due to the text-to speech option available for all digital materials. EBooks are digital files, so they are inherently accessible with text-to-speech, but due to author and publisher concerns over copyright infringement, some eBooks are protected with Digital Rights Management (DRM), which can prevent text-to-speech software from accessing eBook content. Text-to-speech (TTS) is available on most computers, mobile phones, e-readers, tablets and it uses computer-generated synthetic speech to read out text, also if they are not built-in, third party applications are available for many systems.

2. Methodology

2.1. Objective

The main focus of this paper will be to emphasize the importance and role of e-books as teaching aids and the impact of using digital manuals on education. A comparison between e-books and printed books will be included, as researchers believe that e-paper is potentially superior to printed paper in terms of optics, and also the e-books impact on literacy will be analyzed according to the specialized literature.

2.2. Materials

The data is based on the cited articles published during 1990-2016 in the specialized journals and on the cited books. All articles and journals are in field of educational technology, ICT, e-books publishing and education psychology, ICT-based Solutions for Education. The purpose of the chosen materials is to provide a macroscopic and systematic examination for readers to have a holistic and accurate interpretation of the use of eBooks in the field of education.

2.3. Instrument

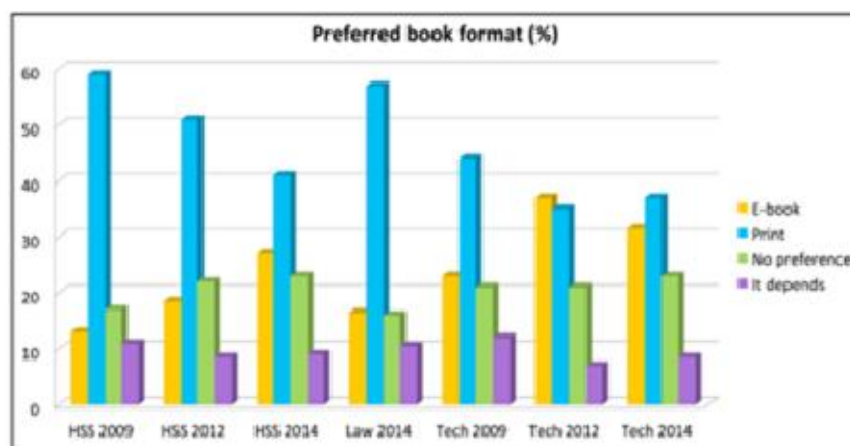
The main instruments will be literature-based, since this paper will represent mainly a review of the articles and works published on the chosen topic, identifying what the research literature in this field tells us about the use of e-books, the role, effects, and impact on the education field. This study involves the use of theory and statistical data. The theory may or may not be made explicit in the design of the research, although it will usually be made explicit in presentation of the findings and conclusions.

2.4. Procedure

In the first step, the main journals, books and articles on which the interpreted data was based upon, were chosen in terms of relevance of the topic and the date of publishing. Some chosen articles included empirical research, which was further analyzed and interpreted in comparison to other studies. The research method followed the following steps, beginning with scientific databases research of the relevant articles concerning the importance, role and impact of eBooks in the field of education, followed by an analysis and selection of the relevant data and the last step was extraction and summarization of the results based on interpretation and evaluation of data.

2.5. Data analysis

A survey conducted in 2014 results showed that eBooks are now a key part of student activity.



Source (Anne Worden, 2014).

Figure 1. Preferred book format by students

Irene-Sofía Romero-Otero conducted a study in 2013 with the purpose of identifying why researchers use e-books. Her study was published in 2013 in Bid, the journal of Universitat de Barcelona (<http://bid.ub.edu/en>), December, number 13.

Table 1. Motives for use of ebooks by status

Use of ebooks		Status		
		Predoc. and univ. students	Researchers	Total
Can be read anywhere	n	6	14	20
	%	85,70	40,00	
Easy to use	n	5	9	14
	%	71,40	25,70	
Permanent access	n	5	23	28
	%	71,40	65,70	
Permit browsing	n	5	20	25
	%	71,40	57,10	
Storage capacity	n	7	15	22
	%	100,00	42,90	
Total	n	7	35	42

(Source: Romero et al, 2014)

Their research study showed that 66.7% of respondents said that it was because of the permanent access (24 hours, 7 days a week) of the resource. 59.5% stated that eBooks allow them to make searches or go to specific parts of the text. On the other hand, 52.4% use eBooks because of their large storage capacity, 47.6% because they can read them anywhere and 33% because they are easy to use.

3. Results

According to the literature, results show that electronic books allow children to build their word recognition, reading comprehension, vocabulary, and phonological awareness, all which are essential to become successful readers, if they are exposed to digital books since childhood (Korat and Shamir, 2007). Penuel et al. (2009) found that with direction and support from parents that used eBooks with their children, language and literacy outcomes increased. Researchers also expect that interacting with the eBooks will motivate children to want to engage in reading-related activities that will also allow them to overcome learning barriers (Shamir & Korat, 2015). According to their article, the effect of reading an electronic storybook (e-book) on Israeli children's language and literacy was examined in kindergarten children (N = 40; age 5:2–6:3) compared to first graders (N = 50; age 6:3–7:4). The children in each age group were randomly assigned to two groups: an intervention group which read the e-book five times and a control group which was afforded the regular school program. Pre- and post-tests included vocabulary and word reading measures. Post-tests included story comprehension and production. Children who read the e-book exhibited significant progress in word meaning and word reading compared to the control group. Kindergarten children progressed in word reading more significantly than first graders across treatment groups. This could be explained by the ceiling effect of the first graders' word reading level which did not leave much room for progress in this skill compared to the kindergarten children. No interaction was found between age and treatment groups. Kindergarten children exhibited a good level of story comprehension, similar to first graders, although their story production was lower. Implications for future research and education are discussed.

The results of one of the largest studies of users carried out by the JISC National e-Books Observatory Project during 2008 and 2009, showed that eBooks have an increasing importance among university students, teachers and researchers, indicating that usage among the UK university community was 65% (JISC, 2009). According to

Soules (2009), the main reasons for the increased use of ebooks are: "the growing number of available e-books, the purchase of e-book packages by consortia, the greater presence of MARC records for e-books in the library catalog, the expanding number of distance learning programs and courses, the emerging familiarity of devices that display e-books, from Kindle to the now-ubiquitous mobile phone/device, and the spread of wireless networks" (Soules, 2009).

According to Chou (2015), teachers who use eBooks with English as a Second Language/English as a Foreign Language notice that children are actually obtaining effective reading strategies, due to the fact that eBooks have multiple features for students. According to their article, autonomous learning triggers students' self-devotion and self-regulation. Their study also articulates an autonomous ESL learning provided by the Fu-Jen Catholic University library in Taiwan. The project "Read & Reflect in English" (for ESL learning) was led by student mentors, who drew up syllabi and activities for a group of 10-15 students each semester since 2012. Students from different subject domains sign up as members each semester. In addition to allocating space for group meetings and learning, the library also provides multimedia learning resources for reading and viewing. Group members were instructed to reflect on issues related to the reading materials. As a result of the weekly "Read & Reflect in English" meetings, members made progress in English learning.

Soules (2009) believes that "Interactive features, which are a characteristic of eBooks are also suggested as a tool to differentiate instruction". Larson (2010), found that a very important implication for eBooks use in the classroom is that teachers would become involved in professional development to learn about the eBooks and how to integrate more literacy applications into curriculum. The basic features of digital reading devices (such as the Amazon Kindle) are described in this article. The author also considers how such devices can advance e-book readership among primary students by offering new avenues for accessing and interacting with a wide array of texts. Rooted in the transactional theory of reader response and a new literacies perspective, this case study examines the reading and response behaviours of two second-grade girls as they read a book on a digital reading device. Findings suggest that using digital reading devices with second-grade students promote new literacies practices and extend connections between readers and text as engagement with and manipulation of text is made possible through electronic tools and features. The author also considers how such devices can advance e-book readership among primary students by offering new avenues for accessing and interacting with a wide array of texts. Rooted in the transactional theory of reader response and a new literacies perspective, this case study examines the reading and response behaviors of two second-grade girls as they read a book on a digital reading device. Findings suggest that using digital reading devices with second-grade students promote new literacies practices and extend connections between readers and text as engagement with and manipulation of text is made possible through electronic tools and features. His study also showed that when teachers are able to integrate eBooks into their classroom and are knowledgeable, new literacies are promoted and connections between the reader and the text are stronger.

4. Discussions

In conclusion, the use of eBooks can be used in the classroom to help promote students' reading comprehension. I consider that teachers should adapt to the use of new technologies, as our current society is highly promoting them, with purpose of promoting student achievement and motivation. I do not consider that traditional teaching with the use of print copy books should no longer be in use in the classroom, but e-books and digital manuals could be complementary. As Cucos (2014) also stated, the digital manual should not be understood as a replacement of the classic one, but as a different product that would promote interactivity and creativity in the classroom, as a modern teaching tool.

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The role of educational platforms to optimize classroom management and motivating students for academic learning

Nicoleta Duță^{a*}

^a Faculty of Psychology and Educational Sciences, University of Bucharest, 90 Panduri Rd., Bucharest 050663, Romania

Abstract

The use of ICT in university teaching practice is contemplated as a necessity facing the adaptation to the European Higher Education Area. The aim of this study is has shown the role of educational platforms to optimize classroom management and motivating students for academic learning, aimed in the implementation of a multiple-choice question taken from the questionnaire administrated to students from various faculties in University of Bucharest. This article focus on the preliminary phase including a written administration of a questionnaire to a sample 160 students. The results obtained by analyzing the responses of the subjects included in our sample have showed that both groups of students, have the same opinions regarding the role of educational platforms to optimize classroom management. In conclusions, it is necessary to stimulate individual and collective reflection process in solving problematic situations in academic learning; to create and maintain an environment of collaboration and social interaction.

Keywords: academic learning, motivation, classroom management, educational platforms, Higher Education.

1. Introduction

We now live in a digital age and today's learners have different needs. Learning doesn't just take place in the classroom, but outside of it as well.

This article is organized in two parts. In the first part, we present the theoretical foundations of the role of educational platforms to optimize classroom management and motivating students for learning, and the second part shows the research methodology, results of research and finally, conclusions. The importance of class activities lies in their effectiveness in achieving learning outcomes, creating a more collaborative environment, and enhancing students' learning in a more practical manner. To achieve these, students will benefit most if the online content which they go through in advance is clearly mapped with the activities in face-to-face sessions.

In today's society, schools are being held accountable for every aspect of student achievement. Classroom management plays a major role in a student's classroom achievement. Unfortunately, many of the education reforms have failed to mention or address the relationship between student achievement and student discipline (American Association of School Administrators, 2002; Brannon, 2010, cited in Hope, 2013, p. 4). Throughout the decades, classroom discipline has been cited as a major issue for teachers (Martin, Chiodo, & Chang, 2001; Martin & Sass, 2010). According to Shupe (1998), student achievement has been affected in schools where discipline and behavioral issues are not appropriately handled (p. 27, cited in Hope, 2013, p. 4).

Internet and related technologies have already had a significant impact on ways to organize learning and studying. On the other hand, emerging trends in Higher Education include a shift from teacher-oriented lecturing towards student-centered learning. Student-centered learning (Land & Hannafin, 2001) is supported

* Corresponding author. Tel.: +0-000-000-0000 ; fax: +0-000-000-0000
E-mail address: author@institute.xxx

theoretically by various overlapping pedagogical concepts such as self-directed learning (Candy, 1991), student-centered instruction or learning (Felder & Brent, 2001), active learning (Ramsden, 1992) and cooperative learning (Felder & Brent, 2001). Historically education was a very different experience when comparing it to the highly sophisticated, digital learning of today (cited in Kurhila, 2004). Today, as trainers and lecturers, the digital age is one which we need to embrace. Technology in education opens up a huge world of possibilities as to how we convey, share and engage with students presenting different ideas, facts and theories. Evertson and Weinstein (2006) define classroom management as: „the actions teachers take to create an environment that supports and facilitates both academic and social-emotional learning”. (pp. 4-5).

This definition concentrates on the responsibility of the teacher and relates the use of classroom management strategies to multiple learning goals for students. Brophy (2006) presents a similar definition: „Classroom management refers to actions taken to create and maintain a learning environment conducive to successful instruction (arranging the physical environment, establishing rules and procedures, maintaining students' attention to lessons and engagement in activities)” (p. 17). Both definitions emphasize the importance of actions taken by the teacher to facilitate learning among the students (cited in Korpershoek et al., 2014, p.11). The emergence of educational technologies offers flexible learning opportunities. Research affirms that online courses provide learners with some flexibility in terms of time, place and pace (Gedera et al., 2015). However, the anonymous nature of the online learning environment can lead to demotivation and disengagement with subsequent minimal participation or even withdrawal. In face-to-face classrooms, students' levels of motivation can be observed to a certain extent with few of the physical cues available. However, online courses on educational platforms present challenges concerns in relation to students' motivation and active participation. In order to enhance students' learning and motivation to learn, Callahan (2014) consider the following as it relates to actions in the classroom.

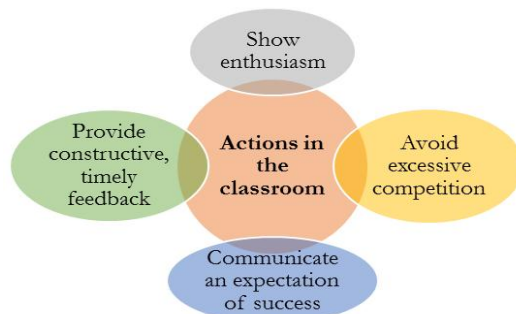


Fig. 1. Actions in the classroom (Callahan, 2014)

Impact of motivation on learning of students in the education is important. Without motivation learning is not possible. So, in education the role of motivation is effective on students learning. Due to motivation students do any task and achieve the goal. Motivation increases the performance of learning. It provides energy and learner achieve the task because she has a direction and performance of learner is increase (Rehman & Haider, 2013, p. 140). Motivation is a factor of high or low of the goal (Brown, 2001, p. 75). Using technology and activities in teaching platforms educational can enhance learning. In the classroom, motivation drives many behaviors and it is important to understand the importance of motivation in an educational environment. At the same time from the current literature review (Cocea, M. & Weibelzahl, S. 2006; Marulanda et al., 2014; Huitt, W., 2011) elaborated some of the starting points of our paper with regard the motivation learning of the students.

2. Methodology

2.1. Objective

This research intends to investigate the opinions of students on the role of educational platforms to optimize classroom management and motivating for academic learning by using virtual platforms (Easyclass, Wikispaces, Google Docs, Glogster, Wallwisher/Padlet, Wordle, discussion forums). It is a descriptive case research based on teaching experience in Higher Education.

2.2. Participants

The sample group for this research includes 160 students from various faculties (Faculty of Letters – 45 students; Faculty of History – 30 students; Faculty of Mathematics – 43 students; Faculty of Geography- 42 students) at University of Bucharest.

2.3. Instrument and procedure

The results of the study were collected through the questionnaire. The procedure for data collection has consisted in the application written questionnaire sent by email. For the analysis and interpretation of data, we used SPSS 17.0.

3. Results

Because the responses were varied, were grouped into categories. The results of analysis of available data, opinions students regarding the role of educational platforms to optimize classroom management, consider as fundamental aspects - in descending order - what is indicated below:

Table 1. Distribution of students' responses regarding the role of educational platforms to optimize classroom management

The role of educational platforms	No.	%
1. Continuous professional development: provide a way to connect with like-minded teachers to exchange ideas, get advice and share resources.	154	96,25
2. Enhanced learning: in today's classrooms, there is often limited time to cover topics fully, used as a learning platform, additional resources can be used to enhance learning.	149	93,12
3. It's easy to learn and use, presents a user-friendly interface.	141	88,13
4. Allows students not only to learn from their teachers but also from other students.	133	83,13
5. When students interact with their teachers outside the class, their attitude towards the teachers changes dramatically in a positive way.	126	78,75
6. Increased motivation: work on the course with ICT is more motivating, and simultaneously they provide a better understanding of the learning object contents, "is a motivational tool to facilitate learning".	112	70
7. Students build their skills of becoming independent and responsible by logging in to view and submit assignments and hence monitor progress.	98	61,25
8. Online resources and materials stored in digital classes are at the fingertips of the students.	86	53,75
9. Promotes student confidence, one student who isn't comfortable speaking up in the classroom is opening up online	67	41,87
10. Students enjoy the interaction brings in the classroom on this 24/7 online environment.	59	36,87

As shown in Table 1, the most important aspects valued by students, accounting for 50% of the total are significant ways regarding the role of educational platforms for optimize classroom management in hierarchical order: continuous professional development (96,25%), enhanced learning (93,12%), it's easy to learn and use (88,13%), allows students to learn also from other students (83,13%), the attitude of students towards the teachers changes in a positive way when interact outside the class (78,75%), increased motivation (70%), students become independent and responsible (61,25%), online resources and materials stored in digital classes are within reach of students (53,75%).

We also point out that to achieve rates below 50% of the total only the following two aspects: promotes student confidence, one student who isn't comfortable speaking up in the classroom is opening up online (41,87%), students enjoy the interaction brings in the classroom on this 24/7 online environment (36,87%). The students confess they are highly motivated because they have access to a large volume of current information.

Note that the data are based on statements, opinions and, therefore, the assertion is valid in terms of honesty and real capacity for self-appreciation.

4. Discussions

The use of social networking in Higher Education is becoming a new form of communication with students and teachers can use these new tools for different purposes. Also, an important factor is the motivation of students to the use of an online environment and the ability to display their own creations.

The implementation of the EHEA has involved great challenges in Higher Education; particularly challenging is a rethinking of teaching methodology, that focuses on the objective of active learning and of the student continued where technologies have an important role. In present, technology has turned teaching on its head and transformed the learning environment. Now it's time to hone in on how to effectively manage technology and ensure teachers have the tools they need to help students achieve higher levels of learning.

According to review literature new technologies provide a variety of resources that perhaps other media can not provide, since it is not to provide information, but also to interact with the materials and to encourage more flexible, dynamic and motivating cooperative learning for students, thus enhancing the teaching-learning process as long as a good use of them is made.

In this direction, it is very important that the educational actors responsible for the policies and the educational curriculum, are being made aware of the effects of using the educational platforms in optimize classroom management and motivating students for academic learning. The role of teachers is to support the student into maximizing the positive effects of educational platforms use.

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Gaining new knowledge by computer experiments

Sava Grozdev^{a*}, Veselin Nenkov^b

^aUniversity of Finance, Business and Entrepreneurship, Gusla Street 1, Sofia 1618, Bulgaria

^bTechnical Colledge Lovech, Sajko Saev Street 31, Lovech 5500, Bulgaria

Abstract

The aim of this note is to share experience in teaching Geometry to a group of students by means of the software product GEOMETER'S SKETCHPAD (GSP).

Keywords: parabola; hyperbola; curve of second degree; observation; invariant.

1. Introduction

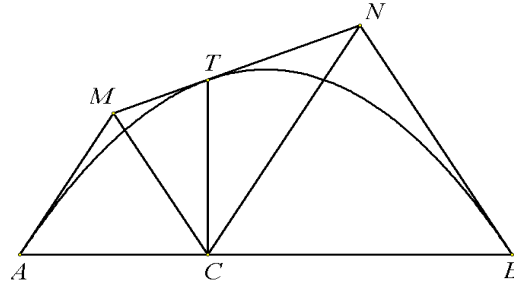
Using dynamic software of recent years turns out to be a traditional instrument in investigating and teaching various geometric notions and assertions (Sergeeva, Shabanova & Grozdev, 2014). Exploring Euclidean Geometry is quite attractive when classic software products like GeoGebra (Zlatanov, 2013) and "The Geometer's Sketchpad" (GSP) (Grozdev & Nenkov, 2012) are applied. The dynamic software could be used simply to illustrate a given geometric problem in order to go deep in the problem conditions and to obtain information leading to the solution. Besides, the software product could be applied to a more detailed examination of the links among the main elements of the geometric configuration under consideration aiming at discovering new regularities or interesting generalizations. On the other hand, the investigation itself could result at geometric objects, which are unknown at a particular stage. In such a case the study of new geometric concepts is stimulated. Usually, new concepts are connected with new theoretical constructions. Consequently, a necessity appears to introduce new theoretical knowledge.

What will be discussed in the sequel is a mathematical task which has been assigned to a group of students. The development of the task is connected with its generalization but on the other side it leads to the examination of new geometric notions and basic assertions with their participation. Also, it is connected with the study of new methods for problem solving with which students are not familiar. The methods are typical for the given type of tasks.

2. Curves of second order

In the framework of the International project MITE (Methodology and Information Technologies in Education), a new category "Research projects network" was included for the first time during the final stage in Moscow, in 2016. Under the form of the game "Geometric Scrabble in Cloud" (Shabanova et al., 2016), three groups of students from Bulgaria, Kazakhstan and Russia participated in particular teams (Shabanova et al., 2016). Each team took part in composing and problem solving on the base of the following starting task by Prof. M. Shabanova: *The segment AB is divided into two parts by the point C. The parts are sides of the equilateral triangles AMC and CNB lying in one the same semi-plane with respect to the line AB. Find the trajectory of the intersection point T of the angular bisector of $\angle MCN$ and the segment MN while C is moving along the segment AB.*

* Corresponding author. Tel.: +359-888-625-818; fax: +359-2-856-72-37.
E-mail address: sava.grozdev@gmail.com



We will discuss some investigations on this task which has been realized by the Bulgarian group of students only. The necessary constructions were done by the software product GSP and a locus was found, which resembled strongly to the graphical representation of the quadratic function – the parabola, well known from the curriculum. For a stronger cogency, a curve of second order was constructed through five points from the found locus. The result of the construction shows that the formulated hypothesis is true probably. Anyway, the realized observation does not prove that the locus is a parabola (a part of a parabola, more exactly). A strict mathematical proof is needed for the purpose.

The next stage of investigations led to the following observation: T is such a point on the segment MN , that $\frac{MT}{NT} = \frac{CM}{CN}$. Then, we may take T on the line MN in

such a way that $\frac{MT}{NT} = k \cdot \frac{CM}{CN}$, where $k \neq 0$ is an arbitrary real number. When $k < 0$, T

is an interior point of the segment MN , and when $k > 0$, the point T is outside the segment MN . The experiments by GSP result in a locus which looks like the previous one. The natural question is whether a parabola is obtained or it is another curve. A curve of second order was constructed through five points from the found locus and the result was the graphical representation of a function, which looked like the inverse proportionality, well known from the curriculum too. This curve is known to be hyperbola. Thus, a generalization of the starting task was obtained containing both a parabola and a hyperbola in its solution.

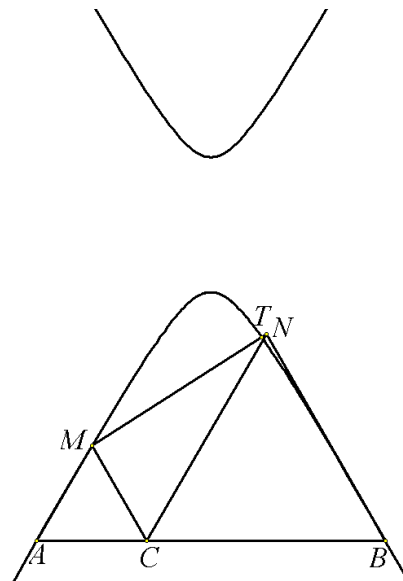
$$k = 85,67000$$

$$CM = 3,57188 \text{ cm}$$

$$CN = 7,75229 \text{ cm}$$

$$\frac{CM}{CN} = 0,46075$$

$$k \cdot \frac{CM}{CN} = 39,47253$$



Further, the attention was concentrated on generalizations connected with the triangles. The equilateral triangle is a special isosceles triangle. It is possible to construct isosceles triangles with bases AC and BC , which have equal or different angles adjacent to them. Experiments were realized under the conditions

$\angle ACM = \angle CAM = \alpha$, $\angle BCN = \angle CBN = \beta$ and $\frac{MT}{NT} = k \cdot \frac{CM}{CN}$. In such a way the following

generalization of the starting task was obtained: The segment AB is divided into two parts by the point C . The parts are bases of the isosceles triangles AMC and CNB with angles α and β adjacent to them, respectively. The triangles are in one and the same semi-plane with respect to the line AB . Find the trajectory of the point T from the line

MN for which $\frac{MT}{NT} = k \cdot \frac{CM}{CN}$ ($k \neq 0$) while C is moving along the segment AB .

The experiments in this mostly general case led to parts of parabolas and hyperbolas again. Thus, the following hypothesis was reached: *The point T describes a part of a second degree curve K_1 .* This assertion is proved in details in (Gorskaya et al., 2016) by analytical geometry means. After some analytical investigations the

following conclusions were formulated: 1) If $k \neq \frac{\sin \alpha}{\sin \beta}$ and $k \neq -\frac{\cos \alpha}{\cos \beta}$, then K_1 is a

hyperbola; 2) If $k = \frac{\sin \alpha}{\sin \beta}$, then K_1 is a doubled line; 3) If $k = -\frac{\cos \alpha}{\cos \beta}$, then K_1 is a

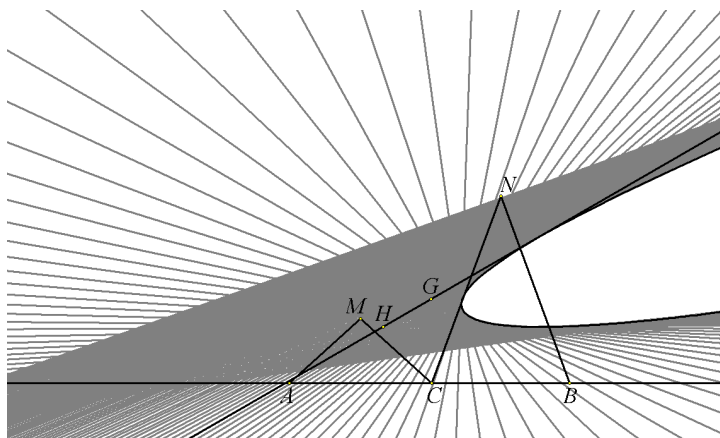
parabola.

In connection with the investigations on the last problem the students became familiar with the following basic knowledge: curve of second degree, degenerated and non-degenerated curve of second degree, types of second degree curves, the Pascal theorem (Mateev, 1977) and its application in the construction of a second degree curve through five points. With respect to grounding the observed results the students learned basic elements from *Analytic Geometry* like: equation of a line, equation of a second degree curve, invariant of a second degree curve, determination of a second degree curve by its invariants.

3. Euler lines as tangents to parabolas

The participants from Russia and Kazakhstan proposed for the point T from the starting task to be replaced by the midpoint of the segment MN and the projection of the vertex C of $\triangle MNC$ on MN . Naturally, this led to looking for loci describing the center of gravity G and the orthocenter H of $\triangle MNC$. The following question was formulated: What is the locus which describes the Euler line GH of $\triangle MNC$? Thus, the next problem was reached: *The segment AB is divided into two parts by the point C . The parts are bases of the isosceles triangles AMC and CNB with angles α and β adjacent to them, respectively. The triangles are in one and the same semi-plane with respect to the line AB . Find the locus of the Euler line of $\triangle MNC$ while C is moving along the segment AB .*

Again, the observations by means of the GSP led to the known parabola but in a different way. The experiments showed that the different positions of the Euler line were tangent to a special parabola. However, the proof of this fact turned out to be much more difficult than the proofs of the previous ones. To obtain a proof it was suggested that the students should be acquainted with Brianchon's theorem, thus understanding the link between a second degree curve and a second class curve. The use of Brianchon's theorem (Mateev, 1977) is accompanied with some computing difficulties in determining the equation of the parabola which touches the different positions of the Euler line.



For this reason another software product was called – namely, Maple. By means of Maple the equation of a second degree curve K_2 was determined. Its examination led to the following conclusions: 1) *If the angles α and β do not satisfy one of the next equations: a) $\alpha = \beta$; b) $\alpha - \beta = 60^\circ$; c) $\alpha - \beta = 120^\circ$, then the curve K_2 is a parabola;* 2) *If the angles α and β satisfy one of the next equations at least: a) $\alpha = \beta$; b) $\alpha - \beta = 60^\circ$; c) $\alpha - \beta = 120^\circ$, then the curve K_2 is a doubled line.*

4. Conclusion

Let us note at the end that the realized investigations of the starting task result in learning a rich set of geometric knowledge. On the background of the theoretical preparation some capacities are developed to construct second degree curves trough given five points and to solve other problems by means of the taught analytical instrument. However, it has been proved that computer experiments stimulate learning new mathematical knowledge. As a result of this the Bulgarian students that have participated in the educational process have elaborated other tasks and together with their friends from Russia and Kazakhstan have been awarded the first rank in the category “Geometric Scrabble in Cloud”.

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Mathematics education-necessity. An empirical study using two scientific research methods

Cătălina Anca Isofache*

*Fac. de Psihologie și Științele Educației, Universitatea București, Șoseaua Panduri nr. 90;
Colegiul Național Al.I.Cuza, str. Trei Ierarhi nr.10, Ploiești, 100010, România.*

Abstract

Area Mathematics and Sciences consists in inventorying the types of topics or issues that one studies in high school, but also their analysis in view of developments in science and technology and in terms of teaching and learning mathematics in other education systems of EU or worldwide.

In research from educational sciences are used various methods, techniques and tools for the measurements carried out to correspond as much as possible with the reality, to be as close to the current situation.

Focus groups are used to find out the views of people in relation to various issues, products or services, as a technique for data collection during a research, either in pilot study stage, or as a primary method of data collection, or for deepening or completing some data previously collected or by other means (ex., through investigation).

One criteria used in order to determine the number of focus groups needed within a research is represented by the theoretical saturation.

Topics proposed within the focus groups are related to the use of modern methods of teaching / learning of mathematics, to the need of using the auxiliary methods on classroom and to the additional homework on mathematics, about the impact of studying the subjects included in the curriculum area Mathematics and Sciences over the personal life, of curricular and social performances over the merit or image in students' community.

Keywords: Focus-group; qualitative analyse; quantitative research method; questionnaire.

1. Introduction

The investigation regarding the applications of mathematics in high school, in terms of the subjects included in the curriculum area Mathematics and Sciences consists not only in inventorying the types of topics or issues that one studies in high school, but also their analysis in view of developments in science and technology and in terms of teaching and learning mathematics in other education systems of EU or worldwide.

The proposed analysis is focused on studies conducted in the natural state, completed with research undertaken experimentally, in order to ensure an optimum validity of results.

In the quantitative research of the topic proposed, hypotheses can be tested and interpreted after completion of the study and those from the qualitative research can generate new hypotheses for further research.

If teachers know the "input" through the processuality of educational activities, they can determine the 'outputs'. By reverse connection, one can produce the effect return over the cause and one can conduct the teaching and learning process of mathematics by reintroducing as inputs of the educational outcomes, involving the activity of students and teachers through its effects and achieving the desired guiding of learning.

By introducing some innovations in the teaching and learning process determines a reconsideration of the methods, of teaching materials, of textbooks, of teachers' training, of the reshuffle in time management.

* Corresponding author. Tel.: 0040724068554
E-mail address: isofache_c@yahoo.com

2. Methodology

2.1. Objective

In order to improve the teaching activity in teaching and learning mathematics in high school, we aim to establish which are the priorities in achieving the general skills of students and high school graduates, (Ciolan, 2002).

As main priorities and objectives of our study, we suggest:

- to examine the curriculum specifics and the mathematics modernity, by identifying the meanings of teaching and learning concepts in science and subject mathematics and the assessment of the spectrum of effective teaching and learning methods;
- to identify the major weaknesses in teaching and learning process of mathematics in high school, which are the errors committed in teaching mathematics and their causes, the teacher's role in reducing or eliminating them;
- to assess the quality of teaching mathematics in secondary education in urban and rural areas, with analysis of school documents from methodological perspective, the consistency with the school specific and with students' development potential, to examine the impact of mathematics on learning social and human sciences, to establish the motivational factor of studying mathematics in high school, their interest genesis for the study of this subject;
- to examine the quality of communication on mathematics and science, by establishing the level of influence of the indirect beneficiaries of mathematics education- parents, local community, society;
- to examine the transfer and the impact of studying the subjects from the curriculum area Mathematics and Sciences over the community life.

2.2. Hypotheses

Among the qualitative and quantitative research approaches, we will stop to check the following hypotheses: the level of qualification and motivation of teachers affects the quality of teaching mathematics in high school, particularly in urban and rural areas, change the impact and performances on mathematics by transferring the teaching to sciences and social and human sciences, especially the judgments value, the urban or rural environment generates a higher or lower interest for the study of this subject and which strategies can be proper for positive changes, students become motivated, enthusiastic and modify their attitude, if teachers-parents highlight the impact of studying the subjects from the curriculum area Mathematics and Science over the personal life, of curricular and social performances, over the merit or image in students' community.

In research from educational sciences are used various methods, techniques and tools for the measurements carried out to correspond as much as possible with the reality, to be as close to the current situation.

We shall present a quantitative research method and a qualitative research method from the domain of sciences of education

3. The questionnaire-based inquiry in scientific research

Mathematical Education – A Necessity aims at contributing to the reform of mathematical education in schools with the purpose of improving the mathematical skills of school pupils and students and of developing their abilities needed on the labour market.

For the scientific research within the method of the inquiry „Mathematical education-a necessity” we forwarded a set of questionnaires of diverse types: factual, of opinion, of knowledge, open and closed.

We present below one of the questionnaires, proposed for administration to Mathematics teachers in the pre-university education.

The introductory section of the questionnaire summarizes the purpose and objectives of the research and contains recommendations about the questionnaire filling in.

In the questionnaire proposed to the Mathematics teachers in the pre-academic education, the questions in se were formulated very clearly, in accordance with the topic, the variables of the research and the hypotheses of research were elaborated clearly and concisely, in an accessible language; it did not suggest the answer and observed the age particulars of the respondents, (Singer, 2001).

The questionnaire proposed for administration is mixed, comprising elements of the following types: factual, requesting objective data, observable and verifiable facts; of opinion, focused on the attitudes of the interviewed subjects; open - supposing the elaboration of the answers, closed – with the selection of one single variant of answer. The data processing is simpler, but the pieces of information are limited.

The pieces of information obtained are diverse, and the data processing is more difficult. The questionnaires with open answers have the advantage of inducing new objectives or new hypotheses in the research conducted, (Neacșu, Potolea, 2011).

The questionnaire is formulated so that it could offer predictions of future behaviour of pupils/students, teachers, parents, and could explain certain attitudes, opinions, reactions.

4. Questionnaire addressed to the Mathematics teachers

Dear Madam / Dear Sir,

Due to your experience and the important role you play in the education of school pupils and students, please be so kind as to answer the questions below. Your answers are confidential and will be used in the elaboration of a study regarding the assessment of the interest of teachers and pupils/students in the use of teaching/learning modern methods in mathematics and the use of auxiliary materials in the classroom. Please check with an X the variant you consider adequate from among those mentioned or write down your opinion on the dotted line.

Date of filling in: _____

No. of school pupils/students in the school: _____

Environment: ☐ rural / ☐ urban

Education Cycle where you teach: ☐ elementary school ☐ middle school ☐ high school

In the school year 2016-2017 did you use modern methods for Mathematics teaching/learning with your pupils / students?

	Yes	No, because:
1.1 within the normal classes		
1.2 within extra-curricular activities		
1.3 in the training for contests and competitions		

2.1 Did you have pupils/students who recorded school progress after using teaching/learning modern methods? ☐ Yes ☐ No

2.2 The number of pupils/students is:

☐ below 10 ☐ between 10-20 ☐ over 20

3.1 Did you have pupils/students who request the use of teaching/learning modern methods? ☐ Yes ☐ No

3.2 The number of pupils/students who request the use of modern methods is:

☐ below 10 ☐ between 10-20 ☐ over 20

4. How useful do you consider the teaching/learning modern methods to be:
 4.1 for your training ?
☐not at all useful ☐ useful to a low extent ☐very useful
 4.2 for the training of your pupils/students?
☐not at all useful ☐ useful to a low extent ☐very useful
 5. The difficulty degree of the problems for the elementary, middle and high school levels proposed should be correlated with the teaching/learning methods:
☐to a low extent ☐to an equal extent ☐to a high extent
 6. The additional problems proposed for solving are useful for the training of your pupils and students within the normal classes:
☐not at all useful ☐useful ☐very useful
 7. The additional problems proposed for solving improve the pupils'/students' performances in other subjects (Physics, Chemistry, Biology, etc.) :
☐no ☐ to a low extent
☐ to a fairly high extent ☐ totally
 8. The interests of pupils/students for Mathematics:
☐has increased ☐has remained the same ☐has decreased
 9. Do you consider mathematical auxiliaries useful?
☐not at all useful ☐useful ☐very useful
 10. Have you used mathematical auxiliaries in the teaching process?
☐not at all ☐ a little ☐very much
 Please add additional information below.
 Thank you!

The analysis of the questionnaire data may be realised by using mathematical instruments, predominately elements of mathematical statistics. The results of the study performed are useful for forwarding predictions and forecasts related to the future behaviours of teachers, pupils/students and parents, direct beneficiaries of the mathematical education necessary on the labour market.

5. Focus-group

We shall present a qualitative research method in the field of educational sciences.

The focus group is a type of interview which combines specific elements of two other types of interview:

- a) group interview - more people discuss several topics
- b) focus interview (centered on the issue) -in which a person or more are interviewed regarding a particular situation in which they took part or which they have knowledge or opinions.

Table 1. Summary of the Focus Group

Focus Group	Number	topic / same opinion	topic / same opinion	topic / same opinion
Students				
Students with high results in math				
Parents				
Math Teachers				
Science Teachers				
Others				

A focus group represents an interview with several people who have certain common characteristics and who provide quality information during a guided discussion in order to reach a better understanding of the topic.

Specific features of focus groups: -represents a simultaneous conversation with several participants (group interview).

One discuss about a certain topic with which the participants are acquainted.

One seeks in particular the interaction between participants and how they influence each other in formulating opinions about the issue discussed.

The discussion is led by a moderator.

Focus groups are used to find out the views of people in relation to various issues, products or services, as a technique for data collection during a research, either in pilot study stage, or as a primary method of data collection, or for deepening or completing some data previously collected or by other means (eg., through investigation).

One criteria used in order to determine the number of focus groups needed within a research is represented by the theoretical saturation. There are formed as many focus groups until it is noticed that no new, relevant information is achieved for the topic discussed (in other words, when what we learn through a new focus group repeats what we have learned from previous groups, without adding further information). One starts from a series of 3 or 4 focus groups, then one applies the principle of saturation. If for the last focus still appear new information, then another series of focus are scheduled, (Krueger, 1988).

Stratification criteria: Another criteria consists in group stratification: there are designed a number of groups to be interviewed depending on the sociodemographic characteristics deemed relevant for the topic being discussed. If the researcher wants to achieve the perspectives of several types of groups over a certain topic, then he sets the number of focus groups considering the participants' characteristics (such as age, gender, level of education, religion, employment status, etc.) that are relevant for the topic studied.

Group homogeneity, the main feature of a group for focus consists in the participants' homogeneity; they must have in common an important characteristic for research: sex (gender), age, occupation.

One main reason for which the homogeneous groups are preferred is that participants should feel comfortable within a group, to be able to be open in expressing their views.

6. Selection of Participants

Selection of participants is very important. One applies the filter method – there are selected the persons who meet the criteria established by the researcher, that have certain essential characteristics to be qualified as participants.

For the analysis proposed within the study "mathematics education = necessity?" we decided to organize focus groups of three types:

1) Focus group formed of 3 students with poor results in mathematics, 3 students with average results in mathematics and 3 students with very good results in mathematics;

2) Focus group formed of three mathematics teachers who teach in secondary school, three mathematics teachers who teach in high school and three teachers of other subjects (physics, chemistry, biology, computer science, etc.);

3) Focus group formed of 5-6 parents coming from different professional backgrounds.

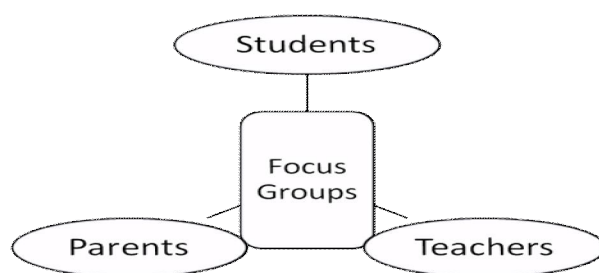


Figure 1. Organizing focus groups.

After the saturation achieved following the discussions within the focus groups, we can design or test a research tool (questionnaire, interview guide, skills tests, etc.). Focus groups are useful for a deeper understanding of certain quantitative data, (Stewart, Shamdasani, 1990).

Topics proposed within the focus groups are related to the use of modern methods of teaching / learning of mathematics, to the need of using the auxiliary methods on classroom and to the additional homework on mathematics, about the impact of studying the subjects included in the curriculum area Mathematics and Sciences over the personal life, of curricular and social performances over the merit or image in students' community.

7. Conclusion

The scientific research we intend to conduct for the optimisation of the teaching and learning of Sciences and Mathematics in high schools requires the use of adequate methods for finding the solutions to the problems and for developing theories. The realisation of an empirical study supposes the selection of the scientific research methods with utmost attention.

The qualitative analysis that we follow within focus groups is beneficial in applying some methods for data processing for testing hypotheses. We should underline that dialogues within focus groups do not consist of and are not limited to gathering more or less data, but to looking that data as information that tell us something, explain something and, especially, to make from those data / information knowledge about their nature, about the links between them, about their meaning, about their usefulness. Therefore, these data are processed by certain specific statistical methods: analysis of longitudinal type: - series in time – aims for the development); the representative sample, the cross -sectional analysis: there is analyzed a group formed on the basis of a certain characteristics at a given moment, the grouping depending on the variable size; ascertainment regarding the uniformity or the heterogeneity of the group.

Thus, mathematics is pervasive in taking decisions based on the interpretation of statistical data.

"Not everything that counts can be counted, not everything that can be counted counts" (Albert Einstein).

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Increasing the quality of learning by solving geometry problems

Costică Lupu*

*Faculty of Sciences, Department of Mathematics-Informatics and Education Sciences "Vasile Alecsandri" University of Bacău,
Str. Mărășești 157, 600115, România.*

Abstract

The purpose of the pedagogical experiment was to show the effectiveness of optional courses in enhancing students' knowledge of mathematics, to verify the effectiveness of formative teaching methodologies applied in the experiment.

The research was conducted between 2016–2017. The assessment test was taken by 184 students from a total of 92 students – 4 experimental classes and 92 students – 4 control classes, all in the 8th grade. The highest percentages were obtained for the marks 7 and 8 (48%) indicating the learning performance level of the respective class, a level that had been set as a goal.

By the end of one year, there could be recorded the progress of students in the experimental class, confirming the hypothesis of increasing the quality of learning Geometry by completing an optional course. By solving problems we learn Geometry.

Keywords: optional courses; teaching-learning; solving problems; pedagogical experiment.

1. Introduction

The aim of the pedagogical experiment was to show the effectiveness of optional courses in enhancing students' knowledge of Mathematics; to verify the formative effectiveness of the teaching methodologies applied in the experiment; to provide models for organizing activities with students that lead to building investigation and interpretation skills, flexibility and mobility in thinking, intellectual work skills, in order to achieve all the objectives; to find ways to organize the evaluation of the educational process, in conjunction with the social goal pursued (Dumitriu C., 2004).

Within the teaching experiment, there were pursued teaching objectives specific to teaching-learning Geometry in secondary education and objectives that contribute to the investigative capacities of understanding, generalization, transfer, analysis, comparison, evaluation. In particular, there was pursued the acquisition and consolidation of knowledge on triangle Geometry by solving problems (Joița E., 2003).

Once elaborated the annual and semester plan for the Geometry optional course, the next step was the design of the learning units before approaching them in class during the school year (Lupu, C., Săvulescu, D., 2000).

Our research is an experimental investigation that involved applying the test method (initial and final-formative) to two samples: 1. The experimental sample consists of four 8th-grade classes from "Miron Costin" School, Bacău; 2. The control sample consists of four 8th-grade classes from "Octavian Voicu" School, Bacău.

* Corresponding author. Tel.: +04-072-358-6101
E-mail address: costica_lupu@ub.ro; costica_lupu@yahoo.com

2. Research methodology

To achieve the research objectives and to validate the hypothesis we selected and applied several research methods and techniques: the pedagogical experiment, the method of conversation, the analysis of activity products, statistical and mathematical methods, docimological test. The curriculum based on school decision/the optional subjects presented served as the basis for designing and conducting the Geometry optional course.

3. Research hypothesis

If we use optional courses in teaching-learning Geometry, then we can contribute to developing and consolidating children's knowledge and increasing school efficiency.

4. The stages of the research

The research covered three stages: 1) Initial evaluation stage (ascertaining stage), conducted between September 19-30, 2016; 2) the improvement intervention (formative stage), conducted between October 2016-February 2017; 3) The final stage of the research covered the interval March 11-22, 2017 and was aimed at identifying student progress.

5. Research results

5.1. Initial test

The results obtained in the assessment test are presented in the table below:

Table1. The results of the initial evaluation test

Class	No. of students	No. of marks <5	No. of marks 5-5.99	No. of marks 6-6.99	No. of marks 7-7.99	No. of marks 8-8.99	No. of marks 9-9.99	No. of marks 10
8 th grade	92	16	20	24	24	8	0	0
Percentage	100%	17%	22%	26%	26%	9%	0%	0%

The arithmetic mean of the marks of students is 6.10. The arithmetic mean (calculated as the sum of all the marks obtained by the tested students and divided by the number of students tested) is the most common indicator of the central tendency; this is 6.10 for the initial test, the distribution of marks / values is briefly presented in the table above. There can be observed that the mean does not faithfully characterize the data obtained. The median represents another measure of the central tendency and for the analysed test it is 6.20.

Analysis of the central tendency for the applied test shows that: - the tested group has a normal/Gaussian composition in terms of features/capacities evaluated, it is homogeneous; - the scores obtained at this test indicate that the majority of students have an average, satisfactory level, given the fact that the test had items with different degrees of difficulty.

Also, it can be observed that a very small number of students can rise above the threshold of mark 8.50 and no student was able to rise above the threshold of mark 9.

The highest percentages were obtained by the marks 6 and 7 (52%) indicating the learning performance level of the class.

5.2. Final testing

The items were chosen so as to cover all cognitive domains, in order to identify the students who have accumulated enough knowledge and those who have problem-solving skills.

The results obtained in the final evaluation test are shown in the following table:

Table 2. The results obtained in the final evaluation test

Grade	No. of students	No. of marks <5	No. of marks 5-5.99	No. of marks 6-6.99	No. of marks 7-7.99	No. of marks 8-8.99	No. of marks 9-9.99	No. of marks 10
8 th	92	4	12	16	20	24	16	0
Percentage	100%	5%	13%	17%	22%	26%	17%	0%

The arithmetic mean of the marks of students is 7.52. The median of the class is 7.50. Analyzing the central tendency for the applied test shows that: the tested group has a normal/Gaussian composition in terms of the evaluated features/abilities, it is homogeneous; the manifestation of the central tendency by rank restriction of the very high marks is, in this case, normal; the graph showing the “curve of Gauss” highlights the achievement of the learning standards; the marks obtained from this test indicate that the majority of students have an average and above average level, which is satisfactory given the fact that the test had items with different degrees of difficulty.

It may be noted that only four students obtained marks below 5 and most students obtained scores above 7. Also, there may be observed that a total of 24 students have risen above the threshold of the mark 8.50 and 16 students succeeded in rising above the threshold of the mark 9.

5.3. Comparative analysis – the experimental sample

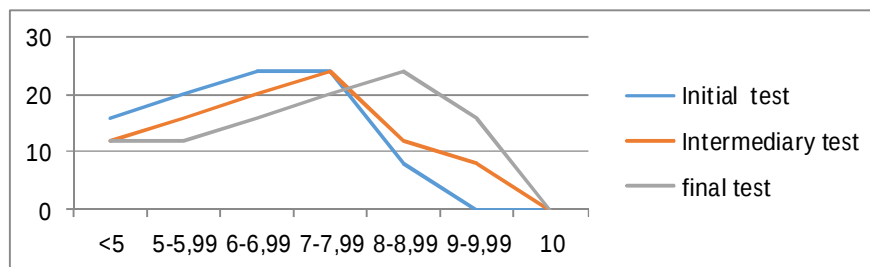


Figure 1. Comparative analysis for the experimental sample

5.4. Comparative analysis for the experimental and control sample

Table 3. The results obtained in the final evaluation test

Grade	No. of students	No. of marks <5	No. of marks 5-5.99	No. of marks 6-6.99	No. of marks 7-7.99	No. of marks 8-8.99	No. of marks 9-9.99	No. of marks 10
8 th M.C.	92	4	12	16	20	24	16	0

8 th	92	10	16	16	20	20	10	0
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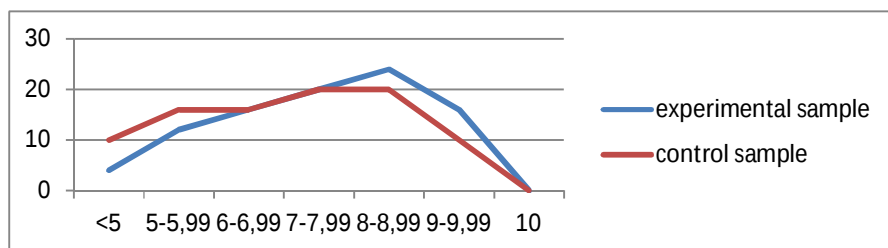


Figure 2. Comparative analysis for the experimental and control sample

Throughout the experiment, the marks that the students got during the optional Geometry course were not recorded in the register, student grading was based on participatory activity during classes and essays elaborated on the basis of a bibliography, the aim being to see how the optional Geometry course influenced students (Lupu C, 2015a).

We highlight the following results: - students master the conceptual dimension of Geometry to a greater extent; - learning is based more on participation, search and discovery; - opening new perspectives regarding the deeper understanding of Geometry (Lupu C., 2013).

The pursued formative objectives were: development of open and creative thinking; building entrepreneurship, independence of thought and action and the willingness to tackle various tasks; manifestation of tenacity, perseverance, the ability to concentrate and distribute attention; building the spirit of observation; developing aesthetic and critical skills, the ability to appreciate the rigour, order and elegance in the architecture of solving a problem or building a theory; forming the habit of resorting to mathematical concepts and methods in addressing everyday situations or in solving practical problems; building motivation to study Mathematics as a field related to social and professional life; building interest and passion for the study of Geometry and Mathematics (Lupu C., 2015b).

6. Conclusions

By completing an optional, students become more responsible and engaged in their own learning activities, and the teacher assumes the role of facilitator rather than that of distributor of information. Most often than not, teachers wonder: What optional course should I prepare for students in order to raise their interest and, at the same time, enhance the effectiveness of the teaching-learning process by means of it (Pîrvan L., 2000).

To prepare students to continue assimilation of knowledge, they should be provided not only with the knowledge of scientific facts, laws and theories, but also with the knowledge of learning methods. The teacher should find rational ways of learning by means of which the students' knowledge may turn into stable and profound knowledge, and thinking acquires properties such as elasticity and independence. The teacher's task is not only to increase the scientific level of knowledge, but also to develop students' thinking, providing them with active methods of knowledge and abilities for the creative application of knowledge into practice (Postolica V., & Lupu C. 2015).

The specifics and characteristics of the educational process determined by the importance of the purpose of education - building personality, implies specific actions and the need to comply with a general criterion for every human activity: efficiency. For these reasons, designing, organizing and conducting the teaching process should

comply with certain rules and be achieved through certain forms, methods and modes of activity. These circumstances create the need to address the educational process in terms of didactic / educational technology (Postolica V., & Nechita E., & Lupu C. 2014).

The effectiveness of education is influenced by several factors: the teaching style and the attitude/response of students to the style used. It is not enough to know how to communicate or to know the students. A good teacher is the one who has the ability to see and understand the needs and problems of students, to empathise with them, adapting his educational and emotional component to their needs. To achieve this, the teacher should be passionate about teaching, should show equanimity, honesty, professional competence and a modern pedagogical view.

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Integrating mass-media influences in students' formal education

Raluca – Florentina Tița^a, Monica Elisabeta Păduraru^{b*}

^a*The Bucharest Univerity of Economic Studies, 6, Romană Square, District 1, 010374, Bucharest, Romania*

^b*The Bucharest Univerity of Economic Studies, 5-7 Mihail Moxa Street, District 1, 010961, Bucharest, Romania*

Abstract

The presence of the media in children's everyday life is evidence. It is important to find a positive role of media in children's lives, considering the amount of time they spend consuming media products. From the perspective of education, we highlight the issues of limiting potential negative influences of media on students and capitalizing more efficiently the benefits. Nowadays, teachers are concerned about some aspects of the media and its influence on children's development: the amount of time spent using media; content to which students have access; and how these contents can be capitalized in the context of formal education. The need for mentoring students in choosing media content seems to be one of the priorities of teachers, since the latter are aware that students choose media content aleatory. This article brings into discussion the importance and the influence that media have on children's behavior and development. The article also analyzes, through qualitative research, the way in which mass media are integrated by teachers in classroom activities and how media influences students and also recommends solutions regarding the using media influences in formal education. The conclusion is that there is a large receptiveness from teachers to introduce into the curriculum a new subject on media. Thus, on the one hand, it would be possible to adapt the school to the social reality, and on the other hand, students could be guided accordingly choose a media content appropriate for their age.

Keyword: mass media; formal education; development; personality.

1. Introduction

Throughout life, the human being is influenced by family, school, church and other educational factors who are present a limited period of time in his life. Instead, the one that is present in a person's life constantly, since the individual is born and until he passes away, is the media. The media is omnipresent in our lives so that we are affected by it constantly, involuntary and often uncontrollably. Media has more functions including: information, interpretation, socialization (Stănciugelu et al 2014, p. 286), entertainment, and education (Coman, 2016, p. 119).

Nowadays, media has become a part of the environment in which children grow, develop and messages broadcasted through the media put their profound mark on psychosocial development, values, codes of conduct, attitudes, modeling the behaviors, way of thinking, feeling and children's behavior. Feelings and attitudes that are formed under the impact of messages transmitted through the media get to externalize through gestures and behavior. (Albulescu, 2003, p. 100)

The way that mass media leaves its mark on behavior, character and personality of children is different, and this must be supervised at all times by their parents or teachers because a superficial oversight can have negative effects on the behavior and personality of children, since that messages transmitted through the mass media influence the values that shape children during their development. Because they are gullible children should be guided through the multitude of information provided by the media, so the manipulative tendency of media should not reflect upon the behavior

* Corresponding author. Tel.: +4-0722-977-324
E-mail address: raluca.tita@mk.ase.ro

and the formation of a character that is easy to handle, especially because the media bring to the attention of the little ones "kitsch with artistic pretensions." (Cucu, 2000, p. 25)

It is important to find a positive role of media in children's lives, especially that the time they spend in the media company is a long one. Studies show that the media presents more negative aspects than positive, but positive ones must be capitalized, and the negatives should be regarded proactively because the media has come to contribute significantly to education, learning and forming young generation. In the last decade trend of use of means of mass communication has been and continues to be enhanced so that mass media has become an integrated part in informal education. The educational environment wants to be consistent with social realities so that the integration of mass media in formal and non-formal education has become a prerequisite, especially since, in this way, the long time that children spend in the company of modern communication comes to be exploited to the maximum in their favor.

It is important to understand that a collaboration between the media and formal education would enhance the education of the young generation and in this way will be capitalized a growing variety of resources. Education for media is part of the so-called new education, and has a number of clearly defined objectives, such as: shaping up a selective attitude regarding the inflow of information; developing assertive and efficient communication; developing receptivity in terms of the true cultural values. (Cristea, 2008, p.180)

Education through mass media must not be seen as a way to push aside traditional ways of teaching and modeling students' personality, but as a way to complement them.

2. Methodology

During the last years, students have begun to use increasingly more the media so that the purpose of this qualitative research is to study the possibilities and opening of teachers to capitalize most effectively mass media influences in formal education.

Given that this research is qualitative, its results cannot be generalized to the entire population, but shows some directions that may be considered in future research.

2.1. Objective

The following objectives have been set for the present study:

- identifying how teachers use the means of mass communication in the classroom activities;
- identifying the influence of mass media messages on students;
- identifying ways to use the mass media in formal education.

2.2. Participants

The sample was composed of 20 teachers who teach at secondary level in the Pro Ingenio School, Ilfov County. The interviewed teachers teach different subjects: mathematics, romanian, english, chemistry, physics, biology, drama, chess, computer, spanish, dance, robotics etc.

2.3. Instrument

For this research it has been used as research method in-depth semi-structured interview (Cătoi, Teodorescu, 2004, p. 219), and interview guide was the tool that it has been used to collect information. (Cătoi, 1999, p. 207) The interview guide was divided into five sections, each of this was intended to help achieving objectives set out in paragraph 2.1.

2.4. Procedure

Information gathering took place from 16 to 30 January 2017. An interview lasted about 20 minutes, some of them were recorded, and the answers of people who have not agreed on the recording were written down. The interviews took place in the Pro Ingenio School before or after classes.

2.5. Data analysis

Regarding how teachers use the means of mass communication in the classroom activities, most of the respondents claimed that „they use the internet in order to illustrate to students the theoretical concepts.” On the other hand, teachers say that sometimes suggests students to watch some television programs „because there are still programs on TV channels such as National Geographic and History depicting events discussed in the classes.” Teachers appreciate that "textbooks would be most suitable for students, but they are not updated with examples from everyday life or even the recent past" and the media helps a lot in this regard, because "young people must look to the future and not to the past."

A significant proportion of respondents consider that the influence of the mass media messages on students "is especially negative in terms of shaping behavior and personality development of students." "Surely mass media has a positive impact too, considering that there are, for example, a number of TV channels like Discovery, Animal Planet, National Geographic, sports programs, but unfortunately those are too few". Currently "more and more students end up emulating people and characters that are promoted by the media, and then they behave like them. Problem is that these characters do not stand out in a positive way, but rather their behavior is harmful to young people personality". The problem of negative influence of mass media on students' "certainly cannot be resolved at this time neither by the school nor by parents who cannot intervene, but on the matter of copying life models, we can intervene through discussions to show students that they can make the mistakes when choosing wrong life models."

Opportunity to use the mass media in formal education is viewed positively by teachers considering that the time spent by students in the company of means of mass communication is a long one, and it should be capitalized to their benefit. Currently benefiting from mass media influences in formal education is difficult because "it lack the means and teachers to deal with it. There should be a person skilled in this area to work effectively with students in this major problem. "A new subject of education through mass media is considered by most respondents as "very beneficial, because it would appear a radical change on pupil behavior. Such matters would help the student both in establishing priorities and in professional orientation. If the student would get to choose the right means of mass communication, and especially their content, during classes we could use good examples form everyday life".

3. Results

The professors are trying to adapt their activities and methods according the ways students get information, so that in their classes, teachers use means of mass communication such as Internet and TV. A problem appears when it is brought into discussion the information content recommended by teachers. If teachers directs students toward programs with quality content that would be useful also in the classroom, the latter are not very happy because they prefer shows, movies or websites that have a negative influence on them. Programs that students prefer contain aggression, violence, pornography, so that they rarely are willing to search for and view good quality stuff that would develop them in a harmoniously way.

The media has an increasingly stronger influence and, unfortunately, a negative one on youth development, in terms of behavior, character, values, etc. This is possible through a number of created "characters" who finally get to be children's favorites and, in many cases, their life examples. The need for mentoring students in choosing

media content seems to be one of the priorities of teachers, since the latter are aware that currently, students choose media content aleatory, with no guidance, either from parents or from the teachers, and this fact may lead to disturbances of behavior and character.

Teachers do not have time to debate an issue as complex and complicated at the same time. The person who would do this should be very well prepared in this area, because it must to know what to address, in order to enable students to choose the best content offered by the media. Our research has shown openness from teachers regarding the introduction of a new subject in curriculum aimed at education through mass media because they believe it would have a positive impact on students' future.

4. Discussions

The influence that media has on people is very high, but it depend on some aspects of the person, such as age, education level, living standards, social class, religion, ethnicity, and degree of information. Thus, well-informed people who are secure in themselves and rely on their own judgment are more difficult to influence by the media.

As shown in Data analysis the objectives set for this research have been reached, and each of them is explained in detail. We can state that media has become the main environment in which young people develop. If their behavior in the past was shaped by the values, customs, norms established by previous generations, today the knowledge, attitudes, opinions and behavior of individuals are influenced by the media. From an early age, children are "directed" by media regarding the development of attitudes, skills, aspirations, through the growing number of media production dedicated to them.

One conclusion of this paper is that media is omnipresent in the lives of young people, but they often do not make the difference between positive and negative influence the media has on them. This influence could be controlled through school that can teach children how to select the content provided by media. It is true that the present generation grow up using gadgets, not toys or books, but the school must guide the student in two directions: on the one hand, to acquire skills in using new devices and choose the correct media contents, and on the other hand not to neglect the importance of books and manuals.

It is our recommendation to readjusted manuals and books, in order to update them to present day so that students find themselves in them and to be motivated to use them.

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The options for higher education of the high-school students who followed a technology line of studies

Iasmina-Cecilia Savescu, Cristina Tulbure*

^aBUASVM “King Michael I from Romania”, Calea Aradului nr. 119, Timișoara 300645, Romania

Abstract

The study aims at emphasizing the extent in which the high school graduating students who followed a technology program of studies wish to go to a faculty, in order to access a higher level of training. Also, the paper focuses on determining and analyzing the relations between 2 core variables related to choosing and building a career for the high school graduates: the line of studies they followed and the field of study they are going to study at the faculty where they wish to take the entrance examination. In order to reach these objectives, a transversal type of research was made on a batch of 111 students registered in the 12th form at three Romanian high schools. To identify the high school lines of studies and the options for a certain field in higher education, a questionnaire of interests and professional studies was applied, which included closed and semi-open questions. The results showed that there is no significant correlation between the line of studies followed in high school and the field of studies students wish to embrace to deepen their studies and competences on the level of higher education. Only a small percent of the students (approximately 20%) have the intention to choose a faculty in a correlated field of studies with their high school program. The data resulted offer major openings for improvements in education quality, and also for the rethinking of counselling and guidance programs at the level of pre-university and university education.

Keywords: professional interests; career options; technology line of studies.

1. Introduction

One of the most important decisions we make along the path of our lives is the decision regarding the profession we should embrace. The decision for a career represents „the process of selection of an alternative career from the multitude of variants available at one given moment” (Băban, 2011, p.239). For the high-school students who are in their final years of study this decision is even more important, as it will have an impact on their professional future.

On the national level, there are numerous studies which claim that the majority of high-school graduates (an average of over 80%) wish to continue their studies at a faculty (Prodan et al., 2015; Pricopie et al., 2011; Rarița, 2014; David-Kacso, Haragus & Roth, 2014; Tulbure, 2010). Differences appear at the level of their background (rural/urban), yet also at the level of the line of studies followed in high-school. Thus, only 54.9% of the students coming from the rural area of the country wish to go to a faculty. Students coming from high-schools where they followed a technology line of studies are less interested in continuing their studies at the university level (65%), meanwhile 82% of those coming from high-schools offering a vocational line of studies and 86,6% of the students who followed theoretical lines of studies wish to go to a faculty (Pricopie et al., 2011).

On the global level, studies indicate an ascending tendency regarding the weight of population with higher education as compared to the total of the adult population (cf. European Commission, Eurostat, 2012, in Prodan et al., 2015). As some studies show, the lack of counseling for a career leads to the low accessing of Afro-American and Hispanic high-school graduates to higher education, especially of those coming from

* Corresponding author. Tel.: +40 0746 079 249; fax: +40 0256 277 126
E-mail address: tulburecristina@gmail.com

families having a low social and economic status (Castleman, Owen & Page, 2016; Atakok, Kam & Kurt, 2014). In the United States, it's been found that 84% of the students attending the last 2 levels of high-school education, the 11th and the 12th grades, have the intention to get a higher education degree, yet among those only 41% of the high-school graduates with ages between 30 and 34 years old finally get the diploma in higher education (Rosenbaum & Person, 2003, apud Spencer G. Niles & Jo Ann Harris-Bowlsbey, 2015).

If we refer to the fields of studies offered by the chosen faculties, the students who followed a technology line of studies in high-school go predominantly to faculties with Economic sciences studies (22,8%), and less to faculties belonging to the Engineering sciences domain of study (12,5%), meanwhile 5,2% wish to attend a faculty in the area of Natural sciences. One possible explanation derives from the fact that 41.1% of the students studying services wish to follow a faculty in the area of Economics (Pricopie et al., 2011). Rarita (2014) shows that orientation towards certain faculty fields of study do not correlate with the line of study followed in high-school.

2. Methodology

2.1. The Objectives

The research is oriented upon two main directions, which have two corresponding objectives:

- to investigate the extent in which the high school graduate students who followed a technology line of studies wish to attend the courses of a higher education institution;
- to analyze the relationship between the technology line of the high school studies the students followed and the field of study of the faculty where they choose to continue their education.

2.2. The Participants

The batch of subjects includes 111 participants, students in the 12th grade at 3 high schools from the districts of Timiș and Gorj. The students' ages range between 17 and 19 years old ($M=17.57$; $SD=0.59$). From the total number of students, 65% are girls ($N=72$) and 35% are boys ($N=29$). All the students are following a technology line of studies, with 3 types of programs: Services ($N=21$); Natural resources ($N=43$); Technics ($N=47$).

2.3. The Instrument

In order to collect the data, the method of an investigation based on the questionnaire was used, with a questionnaire of opinion as a tool, which was applied to every student who participated in the study. The questionnaire includes information concerning students' personal data (age, gender, grade, type of studies, town), and also 7 questions (3 with closed and 4 with semi-open questions).

2.4. The Procedure

The present transversal research unfolded during the first semester of the academic year 2016-2017. Each student from the target-group filled in a typed questionnaire of opinion, after he or she was instructed adequately and they were assured of its confidentiality. Each student included in the research expressed his or her willing agreement to participate in the study. There were selected three high-schools providing technology programs of studies from the rural area, two from the district of Gorj, one from Timiș.

2.5. Data Analysis

The data analysis was performed by using the program SPSS 17.0 (Statistical Programme for Social Sciences). Within the analytical processing there were performed: frequency analyses and correlation analyses.

3. Results

The first objective of research aimed at determining the extent in which the future high school graduates wish to follow a faculty program. According to the results, 82% of the students (N=91) wish to attend a faculty, and 18% of the investigated students (N=20) did not express their desire to continue their studies at the level of higher education. Of the 91 students who wish to attend a faculty, a percentage of 74% declared that they wish a lot or very much to attend the courses of a university, meanwhile 26% of the students have a small or very small desire to continue their studies in the tertiary education.

The second objective is more complex and has in view to establish a relationship between the line of studies of the high-school followed by the students and the field of study at the faculty they wish to apply for. As we see in Table no. 1, of the students who wish to continue their studies to a faculty, 21% follow the Services program of studies, 42% the Natural resources program and 34% the Technics program.

Table 1. The frequency of students who follow the technology line of studies

PROGRAM OF STUDIES	FREQUENCY	PERCENTAGE (%)
Services	19	21%
Natural resources	38	42%
Technics	34	37%

The data in Table 2 shows us the students' options for the field of study in higher education and allow us to conclude that 11% of the total number of students wish to follow the field of Economic sciences, 25% the field of Natural resources, and 11% Technics. On the whole, there results a cumulated percentage of 47% of the students who would focus on the high school line of studies, in the circumstances in which each of these potential candidates for a faculty would continue his or her studies in the same field of studies. The correlational analysis underlined that there is no direct, significant correlation between the high school line of studies and the field of studies of the chosen faculty ($r=-0.12$; $p=0.24$), and the value of the correlation coefficient is not statistically significant. These results made us initiate a more detailed analysis upon the high school lines of studies in order to determine exactly the frequency and percentage of the students who wish to continue their education in a university, in a field of study which is concordant with the high-school type of studies.

By analyzing Table 3, we find that only a cumulated percent of 20% of the students choose faculties which have the same field of studies as the high school they graduated. Thus, of the total number of the investigated students, 6% (N=5) are presently following the Services program of studies and have the intention to continue their studies in the field of Economic studies, 8% (N=7) are enlisted to programs who study the Natural resources and Environment protection and will look for a faculty in the field of Natural resources, and other 8% (N=7) of the students are following technical lines of study and want to continue their studies in Technics.

Table 2. The frequency of options for higher education on fields of studies

PROGRAM	FREQUENCY	PERCENTAGE (%)
Economic sciences	10	11%
Natural resources	23	25%
Technics	10	11%
Math and Sciences	7	8%
Social sciences	8	8%
Humanities	10	11%
Sports	6	7%
Legal sciences	7	8%
Military sciences	4	4%
Health	6	7%

Table 3. The frequency of options for higher education on domains for each line of study

PROGRAM/FIELD	FREQUENCY	PERCENTAGE (%)
Services/Ec. sciences	5	6%
Natural res./Nat. res.	7	8%
Technics/Technics	7	8%

4. Discussions

The results of our study emphasized the large percent of over 80% of the high-school students who wish to continue their studies in higher education. These results are concordant with the majority of conclusions reached by the studies performed on the national and European level (Pricopie et al., 2011; Rarița, 2014; David-Kacso, Haragus & Roth, 2014; Germeijs & Verschueren, 2006). As for the relationship between the high school line of studies and the field of study of the chosen faculty, our study reveals the fact that there is no direct, significant correlation between the high school line of studies and the field of study of the faculty ($r=-0.12$; $p=0.24$). These results are also in agreement with the results of other recent specialty studies (Pricopie et al., 2011, Rarita, 2014). Having to cope with the challenges of the actual society (internet, media, job dynamics, legal changes, globalization etc.), teenagers find themselves bored at school most of the times (Cummings, 2007). Here comes the major role of the educational and vocational counseling, with a major impact in students' personal, professional, educational and social development (Tomșa, 2001). According to some recent studies, a large percent of the Romanian students and their parents have never benefited from counselling and orientation services (Andronic and Andronic, 2011). The access to higher education should be viewed in an integrating way, by considering the entire educational system, all the more so as the factors belonging to the graduated high-school were proven to have great importance (Frempong et al., 2012). The increased interest for tertiary education brings major benefits to the society, in general, as much as it contributes to building and developing the professional competences of the younger generation, in harmony with the social and technological progress.

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The perception of students in technical programs regarding employers' demands and appropriate response

Silvian Suditu^a, Tudora Cristescu^a, Mihaela Suditu^a,
Monica Emanuela Stoica^{a*}

^a*Petroleum-Gas University of Ploiesti, Bd. Bucuresti nr. 39, Ploiesti, 100680, Romania*

Abstract

The present study aims to showcase the perception of the students regarding their preparation carried out during initial training in relation to the requirements imposed by the labour market. The objective of the present paper is also the conducting of an analysis, finalized via the listing of several proposals and solutions as to the upgrading of the training program in question so that young students achieve professional success. With these objectives in view, a questionnaire having precoded multiple answer closed questions and open questions was elaborated, as well as the necessary scaling techniques, both of them being applied to senior year students of the technical specialties. The replies received are grouped and presented in an analytical and qualitative approach in the following section: Results, analysis, and observations.

Keywords: initial training; employers; students; education; questionnaire.

1. Introduction

A widely recognized idea in the pedagogical literature as regards career orientation is that what career development actually entails is not solely a matter of time, tackled during the educational period of a student, but, on the contrary, a complex, intense, exciting, motivating and challenging process, that does not last just during school years, but, conversely, throughout one's entire life. As it is well known and documented, society, as a whole, is characterized by constant dynamism, and high and sometimes heterogeneous requirements, which has led to an ever-increasing pressure as regards professional evolution, which nowadays means that a professional has to have multiple, rare and ever-shifting skill sets. This, however, translates into a challenging position for universities, and research and education institutions to whom befalls the responsibility of delivering well trained specialists that should be readily absorbed into the labour market. The literature on career development interventions at the level of higher education (see Spencer, N., & Joann H. B., 2015) reveals that students tackle personal and context-related difficulties in the course of their professional development. As regards this issue, the following study conducted by the above listed authors on a sample of 2,926 students stemming from the short-term higher education system in California is taken as a point of reference. What are the needs that trouble them? In what area do they require help? The following results are listed and arranged according to the hierarchy of survey results (idem):

“A better knowledge of oneself;

The identification of professional objectives;

Greater certainty regarding their professional plans;

The examination of their professional options;

The pre-planning of their studies;

The acquisition of skills pertaining to job searching” (p. 427).

It is highly relevant that, as evidenced by the data synthesis and the comments of the authors, in the case of American students, the concern for the choice of profession

* Corresponding author. Tel.: +4-072-228-7878
E-mail address: msuditu@yahoo.com

and, later on, the proficiency at this chosen profession is extensively present. As a response to this well-known situation, meaning that everyone is actually aware of the expectations from young students, universities are also continually interested in offering students a more than adequate training, on the one hand, and the opportunity to make professional choices that will entail professional satisfaction and success, on the other hand (see Spencer, N. & Joann H. B., 2015, pp.425-429).

2. Research methodology

2.1. Participants, objectives, research instruments

The previously discussed questionnaire has been applied as a method and tool for research on a sample of 70 Petroleum Engineering senior students. Hence, the present questionnaire consists of 12 questions that seek to showcase the manner in which students evaluate their training from a professional/ scientific perspective but also from the point of view of personal development. The present analysis aims to underline the extent to which the students in the sample consider that their preparation during the initial training phase is in correlation with the standards, requirements, and expectations set out by employers and known by the students as a result of specific student-employer meetings (representatives of companies, corporations, the oil and gas industry, businesses, etc.) hosted by the Petroleum-Gas University of Ploiesti in support of labour market integration of its students.

In order to have an accurate and reliable analysis of the data resulting from using the questionnaire, the questions were grouped so as to cover the following areas of interest:

The extent to which the students feel prepared from a professional/ scientific perspective (measured in responses featuring a satisfaction scale in 5 increments, ranging from 5: highly prepared, to 1: poorly prepared).

The analysis, in terms of strengths and weaknesses, of the level of initial training regarding the pursuit of a successful career.

The anticipation of their ability to meet the requirements of the employers, based on the self-aware level of scientific and personal skills, and on a sincere and objective self-analysis.

The providing of suggestions for enhancing the initial training process in order to offer better integration into the labour market (in the work domain in which students have been trained).

3. Results, analysis, observations

The first subtheme resulting from the grouping of the questions tackles professional training from their perspective. First, it is important to note that 97.15% of the respondents have stated that they wish and intend to work in their area of initial training, which demonstrates a continuity of the decision taken at the time of university enrollment, decision concerning oil and gas engineering.

One hundred percent of the students were involved in professional training programmes. These training programs are in fact part of the university curricula, and, as can be seen from the data, they represent an activity that is highly appreciated by students. For students, the offering of real-life educational contexts, the familiarization with actual work environments, the presentation of current-day technology, the detailing of actual job requirements and of employer standards, represent rare and much appreciated educational opportunities. The knowledge obtained from this type of educational activity is appreciated at an overwhelming extent by students (a list of student replies gathered from the data is given below):

“with significant visual impact and explanatory power;

real-time accumulation of knowledge;

inspiration and help for other exams;

the moment we finally understood what kind of expectations employers have from us;

- the recognition of the equipment we actually learned about during courses and laboratories;
- the correct understanding of the principles and operation of equipment and technologies;
- actually helpful;
- it made everything clear now;
- the familiarization with specialized language;
- graspable;
- easier to remember”.

The present analysis reveals that almost every response to this question is constructed of two parts: one appreciative of the appropriateness and benefits of these training programs, and another one, depreciative, in which they express their dissatisfaction regarding the brevity of the training programs with respect to the time/number of hours allocated. Another aspect that the present analysis reveals is the external participation of the students in external educational programs such as: summer schools, internships, volunteer programs, etc., all of these supporting their professional development. It can be observed from the analysis of the replies to the questionnaire that 36% of the respondents have stated that they have never attended such programs before. Sixty-four percent of the students have stated that they are interested, available and, thus, open to various courses and being employed in temporary jobs – all these being interpreted as added value, measurable points regarding their knowledge and preparedness for professionalism. In our opinion, the significant percentage of students who understand the benefits acquired if one is to follow such an educational trajectory speaks volumes not only in terms of professional preparedness, but also of mental and psychological preparation, especially for the professional future of specialists in the oil and gas engineering field. Their readiness for integration into training programs and their determination when it comes to the planning of their careers in their desired fields has facilitated our view as to their attitudes, the latter being appreciated as positive, open-minded, fair, involved, and well correlated, in relation to the first question in the framework of the questionnaire used specifically in the area of interest concerning the professional/scientific training of the students.

Delving even deeper into the analysis and examining the response patterns of the subjects, it can be observed that there exists a direct and logical link between the desire to remain in their wanted profession (namely petroleum engineering) – 97.15%, the interest associated with the direct and actual participation in supplementary and extracurricular courses, in employment in temporary jobs, etc. (64%), and the way in which they perceive the career of their dreams, the latter expressed via an open-ended question. What can be deduced from the data? A selection from the multitude of responses received is given below:

- “to become a skillful engineer that can deal with any problems that they encounter;
- a career that brings professional satisfaction;
- to have the opportunity of working on an oil platform;
- to become a successful person in an international company;
- my dream career is to become a specialized trainer;
- being able to work in the field that I have studied; this I think would bring me both financial accomplishment and free time;
- to become a good engineer and to learn more about the field in which I will practice;
- to have major equity in a company in the field of oil and gas;
- to become a rig manager;
- to become the best at/ most sought after specialist in the field of drilling and extraction;
- to become a supervisor in an international drilling company;
- to actually enjoy my work and cope with the challenges;
- to work offshore”.

A rapid overview of the responses underlines that the students desire ambitious careers and high professional statuses, coupled with the awareness of the need to learn.

Only 4.28% of the respondents have mentioned that they do not want to practise in this field, arguing a huge mismatch between career and dream aspirations, and what they actually dealt with when they participated in the training programs, and what the field of engineering can actually provide them.

The next group of questions in the questionnaire has as its central theme the description of the methods of personal and professional training in regard to obtaining a desired career in this field, from the perspective of an analysis in terms of strengths and weaknesses, this, of course, being correlated not just with their own perception, but also with the actual expectations of their potential employers.

A careful and relevant selection of student points of view is given below. Thus, among the initial strengths of the training programs, the following have been selected:

- “fairness/ objectivity in evaluation from the part of the teachers;

- practising teamwork in the context of joint projects;

- the reliability of teachers as to how they go about their teaching activities;

- teachers that are very well prepared from a scientific point of view”.

From among the weaknesses, the following have been selected:

- “an unbalanced theory-practice ratio, in favour of the theory;

- insufficiently refined teaching techniques (the teachers lack complex pedagogic skills);

- the methods of teaching are predominantly (too) traditional;

- not enough workshop programs;

- the necessity to study oil and gas English throughout all the years of study;

- the lack of specific software, which would facilitate the possibility of learning through simulation;

- the lack of modernized laboratories (non-functional simulators, too few applications, too few software programs for simulations and calculations)”.

The qualitative analysis of the answers permits a correlation to be formed regarding the level of requirements between the pluses and minuses of their professional training, having in view their self-determined level of professional preparedness, on three levels: scientific preparation, interest in continual training, and continual personal development training (social skills, teamwork, motivation, ambition, competitive spirit, etc.). A percentage of 33% consider themselves highly trained or adequately trained from a scientific and technical perspective. It is important to note that a staggering percentage of 24% are not capable of providing a definite response to this question.

A percentage of 58% of the students are sure that they, to a very large extent or to an adequate extent, are willing and have the interest/ scientific curiosity when it comes to continual training, documentation, information, having a permanent longing to acquire new information, etc.

A percentage of 58% of the students are sure that they, to a very large extent or to an adequate extent, are ready to be proficient at work when it comes to their social and personal skills.

The last group of questions of the present paper solicits from the senior students of the oil and gas faculties to offer suggestions for improving the process of the initial training in the interest of a sound integration in the labour market of this field or, simply, other general recommendations. It is important to note that a staggering percentage (82%) of the students have checked all the proposed variants of the precoded multiple answer questions. Hence, suggestions such as the following are seen as being valid:

- “updating the curricula;

- each semester should have a training programme;

- foreign language classes that tackle the language used in the respective fields;

- etc.”.

Only 21.42% of the students wrote personal replies. Briefly, they are grouped below under the following framework:

“the use of modern teaching methods (simulators, software programs) to a larger extent;

the orientation of teaching and learning activities towards a linking of the theory with concrete practice and the constant detailing of contexts that are to facilitate the learning process;

student motivation via the organization of competitions;

collaborations with companies with respect to part-time jobs at those companies while the student is still in their years of university”.

4. Conclusions

First of all, the objectives of the present paper must be restated, emphasizing that the current microstudy started from the desire to find out the extent to which students can appreciate their actual professional preparedness (i.e., scientific as well as social skills, such as interrelational skills, communication, teamwork, determination, motivation, etc.) in relation to the standards and requirements imposed by employers. Another topic of interest was also the extent to which the students (the sample is composed of students from technical faculties) can make an objective analysis and make sure that their envisioned careers are in view. From the detailed analysis of the research data several ideas acting as partial conclusions for the microstudy can be drawn, as follows:

- the context of the present study offers precious information on how to improve the features of the didactic process, both at the level of existing education plans and regulations as well as improving the level of teaching strategies applied during courses and laboratories;
- the students appear to be realistic regarding the realities of the labour market and display commitment, determination, motivation, availability, and involvement in a continuous process of professional evolution;
- in the end, what is striking to note is the fact that our young students do not solicit aid, guidance, or assistance with regard to matters pertaining to self-awareness, how to establish correct career objectives, knowledge and professional options, career building plans, etc.

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Interactive strategies in teaching engineering sciences for petroleum and gas industry: follow-up study

Silvian Suditu^a *, Sorin Neacsu^a, Cătălin Popescu^a

^a Oil and Gas University of Ploiești, 39 București Bvd., Ploiești, 100680, Romania

Abstract

The study presents a software which is necessary for the students training to become specialists in petroleum and gas engineering, and not only to them. Apart from the analytical presentation of the programme EpsilonE, the educational variant – a software which aims at facilitating learning by solving problems related to real gas mixtures – we are also interested in discovering the students' opinion and detecting the level of satisfaction they share regarding the use of interactive teaching strategies in their training both during the lecture and the seminar classes. Our endeavour is accompanied by the interest in finding out to what degree such programmes designed for educational purposes can help the students to learn and what role they play in increasing the students' understanding and application abilities to help them become trained specialists able to adapt and meet the requirements of the current labour market.

Keywords: Real gases; gas mixtures; educational software; questionnaire; interactive teaching and learning strategies; professional skills.

1. Introduction

The endeavour of university centres to update their teaching methods and to make them more efficient is well known as well as their struggle to help students develop real scientific and professional skills and to fulfil their most important mission – to train adaptable specialists well prepared for the requirements of a more and more competitive, demanding and selective labour market.

Universities provide knowledge of the highest level, but they also try – as an additional value – to facilitate learning and to place knowledge within a context by designing new educational and technological means to make the acquisition of knowledge and of education easier and more efficient.

In this respect, the usage of the educational software – as an instrument for teaching and learning both for lectures and for seminar activities – allows the engineering students to learn by accessing a wide array of electronic sources with the purpose of improving the learning process, of developing fundamental and additional skills, of allowing the acquisition of knowledge in a personal manner, of increasing the students' curiosity and motivation for learning.

We consider that the educational software can be used as a beneficial teaching strategy for allowing the interaction of activities for educational purposes with the modern IT tools.

Under the context of continuous endeavors to increase the quality of teaching for developing the professional skills of the students and for helping them adapt to the demands of the labor market – our study presents a software application designed by

* Corresponding author. Tel.: +4-072-180-5040
E-mail address: silviusuditu@yahoo.com

us and already used by the petroleum and gas engineering students during lectures and laboratory activities. Moreover, we are interested in the way this software application was received by the students. The analytic and descriptive perspective of the present study is accompanied by a follow-up evaluation regarding the impact of using these software applications in general as interactive strategies designed for making learning more efficient and increasing the students' ability to understand, to contextualize and to apply/simulate the application in practice of highly abstract theoretical information.

2. Designing Educational Software: The Epsilon E Application – Formative Value for Petroleum and Gas Engineering. Analytical Description and Ways of Implementation

Starting from a previous study (see S. Neacsu, S. Suditu, Popescu, 2010), we will undergo an analytical presentation of a software model with applicative value to be used by the future petroleum and gas engineers and which was designed by our team to help our students in carrying out their individual or collective projects, their seminar activities etc. More specifically, the software was used during the lecture and the seminars of students from the Petroleum and Gas Engineering Faculty of Petroleum-Gas University of Ploiesti. However we may add that this software can be also useful for other categories of users with skills and interest in this field as it has a friendly interface allowing the access of the desired algorithm with minimal effort.

As a general philosophy, the educational software/application we have designed and used effectively facilitates the solving of problems connected to real gas mixtures. The application (see S. Neacsu, 2003) helps situate the mixture relative to the pressures for the dew-point and boiling point. If the mixture is a biphasic one, the software solves the problem of the liquid-vapour equilibrium, determining the vapour fraction and the compositions for each phase. Among thermodynamic parameters, the software determines explicitly the specific volume of the mixture. The programme includes two databases (Hydrocarbons and Other substances), which contain the parameters for the critical point, the acentric factor and the molecular mass.

2.1. Epsilon E Software – Description of how it operates.

As we can find in the description of the application (see S. Neacsu, 2003), there are two databases (Hydrocarbons and Other Substances) included in the programme, which contain parameters for the critical point and acentric factor for more than 60 substances. Operating is simple. The Introduction data button generates a form which allows the interactive introduction of data (see figure 1). We first introduce the number of components and the action is confirmed by pressing the Confirmation button. After this action, the screen displays a table in which the user can introduce the components and their properties. To facilitate the introduction of data, the user can access the databases. The user will select first the line where the new component will be introduced and then the values from one of the two databases.

Numarul de componente [2 .. 25]: 5 **Confirma**

Exemple:
Amestec cu 5 componente
Amestec cu 2 componente

BAZA DE DATE
Contine denumirea substantei, temperatura critica, presiunea critica si factorul acentric

Hidrocarburi: **Alte substante:**

Nr.Cit.	Denumire	Tcr [K]	Pcr [MPa]	Acc	M [kg/kmol]	Participatia volumica
1	Etan	305,40	4,82000	0,10500	30,00000	0,04000
2	Propan	369,80	4,19000	0,15200	44,00000	0,38000
3	Izobutan	408,10	3,60000	0,17600	58,00000	0,08000
4	n - Butan	425,20	3,75000	0,20000	58,00000	0,44000
5	n - Pentan	469,60	3,33000	0,25200	72,00000	0,06000

Parametri de satre pentru amestec:
Presiunea [0,1 .. 2,5] MPa: 0,5 **Temperatura [233 .. 473] K:** 303

Calculeaza **Paraseste**

Figure 1. How data is introduced (after S. Neacsu, 2003)

The user will choose the desired substance; will click it and, automatically, its name and all the necessary information will be imported from the database on the selected line in the table. On the last column of the table, the user will write the molar participation (or the volume participation). The sum of component participations must be equal with one. The software checks the fulfilment of this condition and, if it is not verified, the calculations cannot be undergone. By pressing OK, the programme runs the necessary calculations giving the presentation of the results as charts or graphs. Figure 2 illustrates the first form of rendering the results graphically and here one can notice the pressure for the dew-point and boiling point, the situation of the mixture and the calculation for the liquid-vapour equilibrium. The vaporization fraction and the specific volume of the mixture are also displayed.

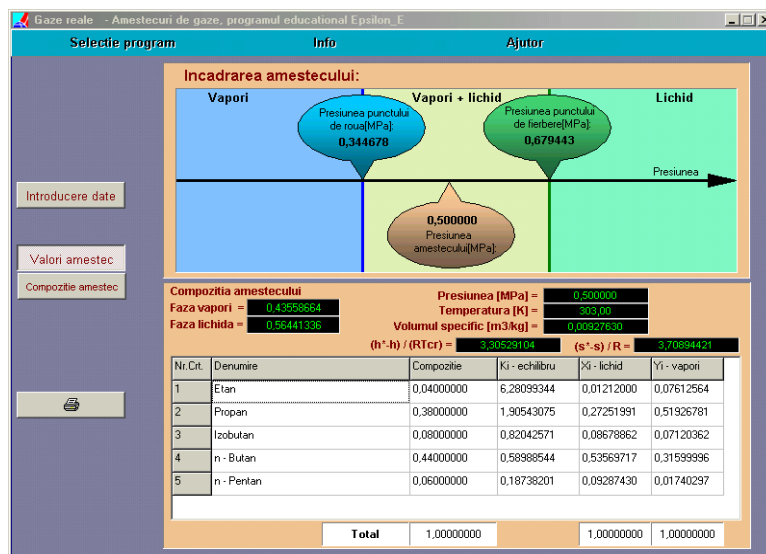


Figure 2. The Representation of the Results Obtained (after S. Neacsu, 2003)

Further (see figure 3) the user can select, using the three buttons above – Mixture composition (Compoziție amestec), Composition of the liquid phase (Compoziția fazei lichide) and Composition of the vapour phase (Compoziția fazei vaporii), what composition will be displayed and illustrated by chart. Additionally to the chart, the programme displays the values of compositions corresponding to each phase.

The programme can establish – according to the results – what diagrams to calculate, what type of graphical representations to display or their graphical representations. The interface can change dynamically, according to the type of the mixture, number of components, properties of the components etc. By pressing the Print button, the user can get his results/diagrams in a printed form. In figure 4, we give as an example a model of how data can be obtained by using the EpsilonE application.

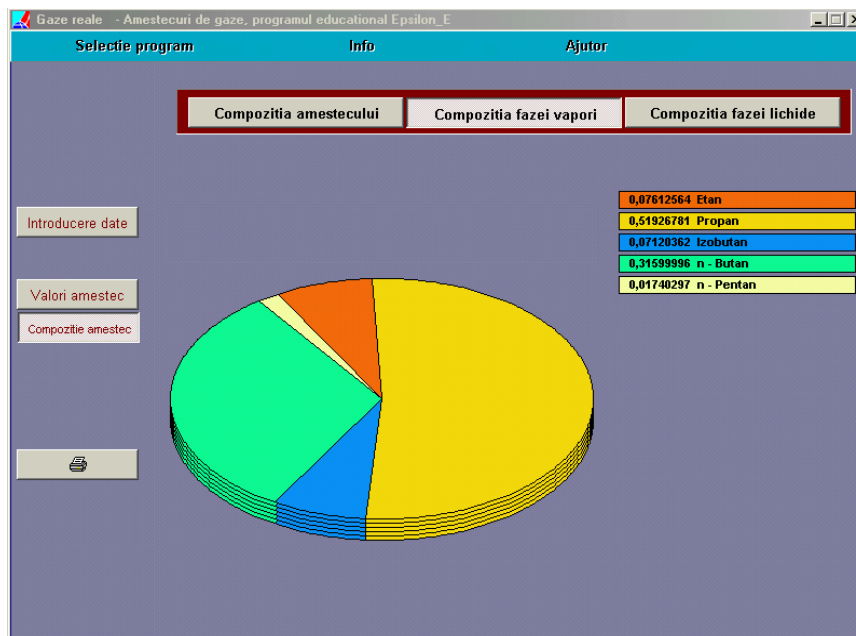


Figure 3. The display of the composition (after S. Neacsu, 2003)

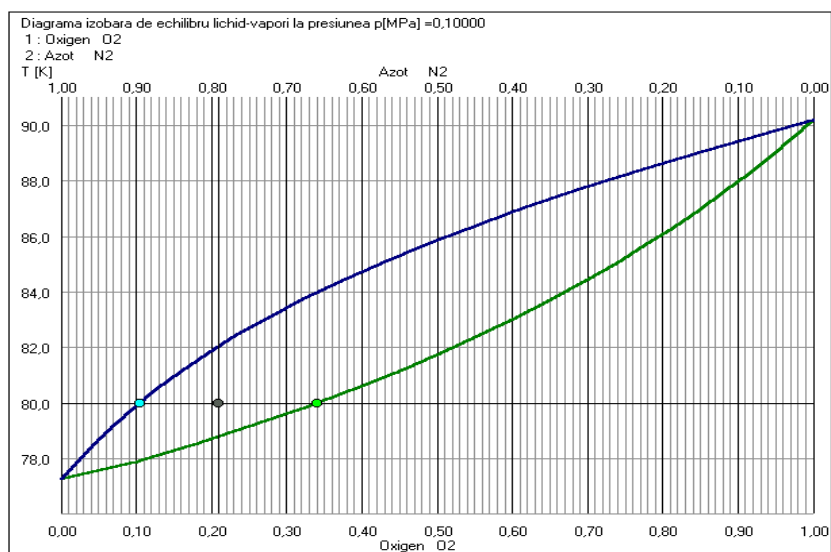


Figure 4. Data display in EpsilonE. (after S. Neacsu, 2003)

3. The Impact of Using Software on Learning and Development of Professional Skills for the Petroleum and Gas Engineering: Analysis Based on a Questionnaire

We have presented above only one type of application we have designed and we use with our students. Actually we are widely interested in the idea of facilitating learning by giving the students a context for learning, by introducing applications which could offer understanding, versatility and dynamism to the activities undergone during lectures or seminars. In the same time, we consider the teaching activity not only a transmission of knowledge but a good management of teaching, an act of communication, and also an intentional activity in which the teacher says his intention to produce successful learning (see M. Suditu, 2012 pp. 64-69). We also keep in high regard the feedback the students give us, hoping that there is no great distance between our own intentions/projections and the reality they perceive. As a consequence, in order to receive the students' opinion about using software applications as effective work instruments for undergoing applications for lectures and seminars, we have given a short questionnaire to find the level of satisfaction to the students from the Faculties of Mechanical Engineering and Petroleum and Gas Engineering of the Petroleum-Gas University of Ploiesti, who have used this programme and other similar ones. We intended to discover their perception on the quality of understanding, learning and application, as a consequence of introducing these interactive means for teaching and learning during lectures and seminars. We also tried to see which were the suggestions, the comments of the students about the integration of such methods in the limited time dedicated to their course. The Questionnaire is made up of questions with pre-codified answers, closed answers of the type yes/no. For the satisfaction related

The structure of the questionnaire refers to the following interest areas:

- How much software programmes are used in /for the study of positive sciences;
- Examples of the types of programmes used frequently;
- Advantages of using educational software for facilitating learning;
- Other comments, observations, suggestions.

4. Qualitative Analysis of the Acquired Data

The analysis of the data obtained by applying questionnaires shows the following:

In unanimity (100%) the students confirm that they use software for learning engineering sciences, but they do not use them very often. The answers vary between in a high measure (69%), cannot tell (10%) and in a low measure (21%).

From the answers we can draw the conclusion that activities which make use of software are mostly done during seminars/laboratory activities, but the difference is not high, as percentage.

100% of the students agree that using software helps them learn, increases their ability to apply knowledge and to use what they know with flexibility.

Among the advantages our students identify related to using such educational applications, we mention:

- The development of professional and scientific skills;
- Offers a good structure for learning and facilitates the synthesis of the knowledge acquired;
- Makes learning time more efficient and offers immediate feedback and the possibility to advance step-by-step.
- Ensures the correct usage of work algorithms.
- We have to give credit to the suggestions and observations made by the students;
- The designing of programmes with more calculation options to use in multiple situations.

- Modifications at the level of the calculation system/ the algorithms to increase processing speed.
- The implementation of the software for all the subjects of study in order to increase motivation and make them more attractive;
- Focusing the programmes on the systematization of information and keeping only the essential for the petroleum and gas engineering in the regard of preparing the students to find jobs on the current labour market.
- A more modern design and higher fidelity for the programmes in use.

5. Conclusion

As a consequence, we can state, in agreement with the students in our test group that efficient learning means to find ways which help understanding and increase the possibility of applying specific knowledge with ease in concrete contexts. The designing of programmes – such as the one presented in our study for the unit “Real Gases” – for all the chapters of fundamental disciplines (as the students have suggested) would represent an effort for the teaching staff, but this effort will help the students to become specialists prepared to meet the requirements of a dynamic and highly competitive labour market. And this is actually the most fundamental mission of high quality university training.

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A correlative study between learning strategies and independent learning at first year students preparing to become teachers

Lorena Peculea^{a*}, Adrian Peculea^{b*}

^a*Technical University of Cluj-Napoca, Specialized Department with Psychopedagogical Profile, No. 15, Constantin Daicoviciu Street, 400020, Cluj-Napoca, Romania*

^b*Technical University of Cluj-Napoca, Faculty of Automation and Computer Science, Computer Science Department, No. 26-28, G. Barițiu Blvd., 400027, Cluj-Napoca, Romania*

Abstract

One of the educational aims, especially for the higher education institutions is to equip students to achieve independent learning. The main objective of this research is to reveal possible correlations between learning strategies dimensions and independent learning. The sample of subjects is comprised of first year students in initial teacher training (N=233), from Technical University of Cluj-Napoca, Romania, attending classes to prepare for a teaching career. To assess the learning strategies of university students we used the CEVEAPEU (Gargallo, Suárez-Rodríguez & Pérez-Pérez, 2009), a questionnaire more completely than those classically used. To measure independent learning, we used the shortened version of the AILI questionnaire (Elshout-Mohr, Van Daalen-Kapteijns, & Meijer, 2004). Data obtained were statistically descriptive analyzed by calculating means, and Pearson r correlation coefficient. Both metacognitive skills and learning strategies used by prospective teachers were average level. As this study concludes, the more frequently, autonomous and diverse strategies the students use, the better they could take on the responsibility of their own learning process.

Keywords: learning strategies; independent learning; metacognition; higher education; prospective teachers.

1. Focus of the paper

Increasingly, universities are being required to pay greater attention to improving teaching and enhancing student learning. Many students have trouble making the transition to the more independent learning required at university compared with their previous study. In this research, we believe that independent learning is an ongoing, rather dynamic process, responsible for the educational interventions, and not a static product. We believe that to support them in developing independent learning, we must take into consideration the development of metacognitive skills.

2. Theoretical framework for the study

The term 'learning strategies' refers to what students know and how they must learn and construct and direct their learning. Weinstein et al. (2010) maintains that learning strategies include emotional, motivational, metacognitive, cognitive and behavioral activities and processes that facilitate significant understanding, learning and processing as the integration of the new knowledge in mind. For instance, researchers studied motivational constructs (e.g., attributional beliefs, self-efficacy, self-regulation, and motivation), which have emerged as agents to internalize, activate, and execute one's own learning strategies (Schwinger, Steinmayr, & Spinath, 2009). According to Gargallo, Suárez-Rodríguez & Pérez-Pérez (2009) the learning strategies can be understood as 'an organized, conscious and intentional whole of

* Corresponding author. Tel.: +0-000-000-0000 ; fax: +0-000-000-0000
E-mail address: lorena.peculea@dppd.utcluj.ro

what the student does to efficiently accomplish a learning objective in a given social context'. Higher achieving students use more learning strategies than lower achieving students. Furthermore, research has consistently provided evidence for the effectiveness of various learning strategies for university students, especially in increasing self-regulation (Peterson, Lavelle, & Guarino, 2006).

Emerged from the constructivist learning theory, the concept of independent learning is not new, but it is one on which there is a surprising lack of consensus as to what it means (Broad, 2006). There are a few different terms used to describe independent learning, such as self-regulated learning, self-directed learning, learning to learn, self-learning, self-access learning etc. The terms 'self-directed learning' and 'learning how to learn' are sometimes used interchangeably with independent learning (Meyer et al, 2008). Concerning the importance of metacognitive aspects of independent learning, we use the term 'independent learning' to designate a type of learning and studying that is directed by metacognition. The literature identifies two distinct aspects of metacognition: knowledge about cognition (knowledge or beliefs about what factors or variables interact and in what ways to affect the course and outcomes of cognitive enterprises) and the regulation of cognition (a set of cognitive approaches that help students control their learning) (Flavell, 1979). A component of metacognition that has received relatively little attention concerns metacognitive experiences. The term 'metacognitive responsiveness' includes students' sensitivity to metacognitive experiences (idem); general awareness of metacognition and the importance thereof; and curiosity to learn about metacognition by information and feedback. Although there are a few studies related to independent learning skills, no study was observed related to university students' and prospective teachers' self-regulated learning skills in certain pedagogical courses in pre-service training period. Currently, an important dimension of teacher education is linked to metacognition and importance of explicit teaching of metaknowledge and metacognitive skills that would be learned intentionally, volunteer by students (Miclea, M., 1998). In this respect, teachers themselves are 'the real authors and actors of their own training and autonomy, in a self-assumed initial and continuous training, helped by coherent projects supported by a rational organization of curricular approaches that make them more responsible' (Bocos, M., 2013).

3. Methodology

3.1. Objective

In order to explore the learning strategies and the independent learning of prospective teachers, it was realized a correlational study design which aimed to identify the level of the development of these variables and the correlation established between them. To this end, it seeks answers to the following questions: (1) What is the distribution of learning strategies of prospective teachers according to sub-dimensions? (2) What is the level of the development of independent learning at prospective teachers involved in the research? (3) What kind of a relationship is there between the learning strategies of prospective teachers and their independent learning? The assumption of the study was the following: There is a positive and significant correlation between the learning strategies used by students, and their level of development of independent learning.

3.2. Participants

The participants in this study were 233 first year students from Technical University of Cluj-Napoca, enrolled in the program for initial training of teachers. The reason why first year students were chosen as sample is that their learning strategies could be identified at the beginning of their university education.

3.3. Instruments

To evaluate the learning strategies, we used the Questionnaire to Assess Learning Strategies in University Students (CEVEPEAU) (Gargallo, Suárez-Rodríguez & Pérez-Pérez, 2009). In this research, the Cronbach Alpha coefficient for the whole questionnaire used in this study was .914. To measure the independent learning, we used the shortened version of the Awareness of Independent Learning Inventory (AILI) (Elshout-Mohr, van Daalen-Kapteijns, & Meijer, 2004) which measure three dimensions: metacognitive knowledge MK (about persons, strategies and study tasks), metacognitive regulation MR (planning, monitoring, evaluation) and metacognitive responsiveness (metacognitive experience ME). The Cronbach-alpha coefficient calculated for the questionnaire indicates a very good internal consistency of the research tool (α Cronbach = .88).

4. Results

Concerning the efficient use of learning strategies and the development level of the independent learning for future teachers, it was resorted to calculate an average of responses for each of the six dimensions of learning strategies and of the three dimensions of independent learning. Analysis on the level of observed scores on subscales, showed a medium perceived level of learning strategies ($M=3.58$), but also of the development of the independent learning ($M=4.47$). The only higher mean at the level of independent learning was found at ME ($M=4.54$). For learning strategies, the lowest mean was found at affective components ($M=3.44$).

To establish possible correlations between the six dimensions of learning strategies and the three dimensions of independent learning, our analysis has focused on the correlations between the scores for each of these dimensions. Thus, regarding the correlation established between the motivation strategies and the three dimensions of AILI it is found that there exists a significant positive correlation ($0.65 < r < 0.69$, $p < 0.001$). Therefore, the higher the positive value of MK and MR, the higher the positive value of the motivational dimension of learning strategies and vice-versa. Relatively low were the correlations ($r=0.36$) of the motivational strategies and ME, the third dimension of the AILI. The results show non-significant correlations ($0.01 < r < 0.03$, $p > 0.001$) between the three AILI factors and affective components, as measured by CEVEAPEU (physical state and state of mind, and anxiety). Following the established correlation between the metacognitive strategies and the three AILI factors, it is found that between them there is high significant correlation ($0.74 < r < 0.79$, $p < 0.001$). The highest correlations ($0.79 < r < 0.84$, $p < 0.001$) were found between the three scales of AILI and the context control, social interaction and managing resources strategies as measured by CEVEAPEU. The data obtained show moderate and high correlations ($0.51 < r < 0.79$, $p < 0.001$) between the three AILI factors and information search and selection strategies & information processing and use strategies.

5. Discussions

The aim of this study was to identify and to analyze the use of learning strategies and independent learning levels of prospective teachers, but also the relations established between them.

(1) The use of learning strategies is, generally, positive. On the Likert scale with 5 points, these results suggest that a medium use of learning strategies involves skills to conduct automatic activity, which is performed with few or ineffective learning strategies. Also, the prospective teachers could be active, persistent, and able to strategically manage their learning at higher education. So, it is expected that the prospective teachers to effectively use learning strategies, as a part of their studies, but also to reflect on their learning and their metacognitive skills development. Nevertheless, these results should be regarded as encouraging when we take into

consideration the fact that these students have had no training on strategy learning and still have 'medium' levels of strategy using.

(2) The development level of the independent learning is, generally, positive. On a Likert scale with 7 points, it appears that the independent learning has a medium development. Moreover, the research results show a medium development of MK ($M=4.46$) and of MR ($M=4.43$). Thus, it ensures the premises for students to be independent learners which involves being metacognitively aware of their cognitive process and to monitor, analyze and evaluate their learning processes and performance. There is a slightly higher mean of the development of ME, which means there is an increased sensitivity to external feedback but also to internal feedback during a learning episode. So, there is a slightly high development of the affective experiences, that accompany and pertain to any intellectual enterprise. So, it becomes important the transition from the cognitive dimension to its integration with the affective and the behavioral one.

(3) The results show significant correlations between metacognitive strategies and the three dimensions of AILI. Therefore, the future teachers who have a higher development of the metacognitive strategies have also a higher development of MK, MR and ME and vice-versa. The next highest correlation is between context control, social interaction and managing resources strategies and the three AILI factors. Another significant correlation was identified between information processing-related strategies and MK and ME, thereby students' knowledge of cognition, knowledge of how to regulate their cognitive engagement in the task and metacognitive attitude contribute to the selection and use of learning strategies. Somewhat moderate correlations ($0.51 < r < 0.57$, $p < 0.001$) were found between the MR and information search, selection, but also information processing and use strategies. It can be a very important issue because the information processing-related strategies used by students is more in line with surface study strategies, which cannot be associated with MR, that would involve deep processing strategies. Lower and no significant correlations were found between affective components of learning strategies and MK, MR and ME. Anxiety appears to be a cause that prevents students from achieving good results and that causes them to make poor decisions on the learning strategies to use. For example, anxiety is one of the most important variables that affect considerably educational progress, learning, performance and learners' attention, concentration, and information retrieval. The correlations of the motivation strategies sub-scale and ME were also relatively low. Metacognition affects the student's motivation to learn because it directly affects attribution and self-efficacy. Therefore, the conducted study hypothesis is partially confirmed.

6. Conclusions

It is always said that the mission of educational systems and organizations is to prepare competent and independent people for life. Based on the study results and their analysis, the following conclusions can be drawn:

- The metacognitive skills of the prospective teacher are in middle level and MK was found to be significantly better than MR at almost all learning strategies. An important idea for the stimulation of deep learning is to adopt a metacognitive attitude towards learning and knowledge and to be interested in knowing and improving their metacognitive strategies.

- It may not only be enough for the first year students to apply the learning strategies, they should also be encouraged to develop a habit of mind for using combined learning strategies in varying conditions.

- Initial training for didactic career should be organized towards learning strategies instruction and there should be research-development teams in this respect. We believe that formal curriculum should include courses on metacognitive ability development and efficient learning. These could help in developing 'reflexive teacher' qualities and learner autonomy.

Systematically training students to design, organize, monitor and evaluate their learning process is not possible unless the entire university focuses on students and

their training needs. Initial teacher training to the knowledge of mutations in postmodern didactics is the basic condition for a successful functional education reform.

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Analyzing the relationship between students' personality type and the technology line of studies of the high school they attend

Iasmina-Cecilia Savescu^a, Cristina Tulbure^{a*}

^aBUASVM "King Michael I from Romania", Calea Aradului nr. 119, Timișoara 300645, Romania

Abstract

The paper aims at analyzing the relationships between 2 essential variables which high school graduates should have in view when they choose and build a career: the line of studies of the high school they attend and their vocational personality type. In order to reach the set objectives, there was performed a cross-sectional investigation, which had an ascertaining character, over a target population of 111 students enlisted in the 12th grade at 3 high schools from the districts of Timiș and Gorj. To determine the vocational personality type, an adjusted version of Holland Occupational Preference Questionnaire was used. The data was processed by using the computer program SPSS 17.0. The results have revealed the existence of some significant differences when we consider two personality typologies: the Enterprising and the Conventional, which are mainly met among the students who attend the Services program of studies and less among those enlisted at the programs of Techniques and Natural Resources. As for the other 4 typologies regarding personality (Realistic, Investigative, Artistic and Social) there were no evidence of significant differences corresponding to the high school line of studies, which shows the absence of a direct relationship between the students' vocational personality type and the professional field they prepare for during high school. The study provides some insights for the domains of professional counseling and orientation for the high school students coming from the rural areas, for their parents and also for their teachers active in pre-university and higher education. We think that one of the workable solutions would be an extension of the programs of vocational counseling and their more frequent usage earlier during primary school, and later in secondary and high school.

Keywords: professional interests; personality types; technology line of studies.

1. Introduction

The process of adaptation and successful transition from school to faculty and from faculty to a professional life is based upon the high school students' capacity to make a career choice, to implement the chosen profession, as well as to adjust to that choice. The type of vocational personality of the individual plays a major role regarding his or her academic achievement and future professional life. One of the well known and widely used models of vocational personality types was designed by Holland at the end of the 20th century XX (1973; 1997). According to this model, individuals may be classified into 6 main personality typologies, based on their resemblance to the following six ideal vocational personality types: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), Conventional (C) (Gorji et al., 2011; Băban A., 2011; Rezaei et al., 2011).

The core characteristics of each type of personality are synthesized by Niles & Harris-Bowlsbey (2015) and Băban (2011) as follows:

- Realistic individuals prefer those activities which require the handling of instruments and objects; they display technical, mechanical and practical abilities; the characteristics of this type are: perseverance, conformism, handling skills, perspicacity;
- Investigative (I) individuals are open to research and investigative activities based on observation; they have scientific and math competences; this type is

* Corresponding author. Tel.: +40 0746 079 249; fax: +40 0256 277 126
E-mail address: tulburecristina@gmail.com

described by high analytical, methodical and rational capacities, and a high level of curiosity;

- Artistic (A) individuals are described by the following traits: creative solving and self-expression; artistic abilities and well developed imagination; expressiveness and artistic creativity; attraction for less structured activities, divergent, intuitive, emotion-based activities;
- Social (S) individuals enjoy communication and interpersonal relationship, they are interested in education and social assistance; most of them are empathetic, patient, friendly, responsible, generous;
- Enterprising individuals are attracted to teamwork, mainly as group leaders; they develop entrepreneurship and interpersonal competences, and have a persuasive, dominant, adventurous attitude;
- Conventional (C) individuals prefer the explicit and systematic handling of factual data, and organizing written data; they display management competences, skills for organizing and processing information; they are practical, conforming, orderly, and efficient.

Studies in the specialty literature underline the importance of school, academic and career orientation according to the vocational personality type of the educated people (Razaei et al., 2011; Chen et al. 2012; Šverko & Babarović, 2016). Leaving from these grounds, our paper aims at developing an analysis of school orientation for the high school students following the technology line of studies, to determine the extent of concordance between their vocational personality type and the line of studies of the high school they attended. In Romania, the Technology high school is structured as follows: the lower (junior) high school, which comprises the 9th and 10th grades and develops general competences, on three programs of studies: Natural resources and Environmental protection, Technics and Services. This level provides no certification paper. There follows the senior high school (high level) comprising the 11th and 12th grades, which ends with a Level 3 certificate of professional qualification (www.tvet.ro).

2. Methodology

2.1. The Objectives

The research aims at two main objectives:

To identify the vocational personality type of the high school students;

To determine the differences between the vocational personality types, having in view the high school line of studies (the Technology line of studies, the programs of Services, Technics, and Natural resources).

2.2. The Participants

The study included a batch of 111 high school students from the rural areas of the country, enlisted in the 12th grade at 3 Technical High Schools from the districts of Timiș and Gorj. The students had ages between 17-19 years old ($M=17.57$; $SD=0.59$). Considering the high school's line of study, 19% of the students attended the Services program of studies ($N=21$), 39 % the program of Natural Resources ($N=43$) and 42% the Technics program of studies ($N=47$). As for the genre distribution, 65% were girls ($N=72$) and 35% were boys ($N=29$).

2.3. The Instrument

The research method was the investigation based on a questionnaire, and an adjusted version of Holland Occupational Preference Questionnaire was used as a tool meant to identify the dominant vocational personality type of each student, who may be further placed in one of the 6 main categories: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), Conventional (C).

2.4. The Procedure

The cross-sectional study took place during the first semester of the university year 2016-2017. Three high schools providing the Technology lines of studies were randomly selected from rural areas belonging to the districts of Gorj and Timiș. The students were explained the purpose of this research, and each student's engagement was voluntary, based on the personal agreement to participate in the study. The questionnaire of opinion was introduced to the students, who were instructed regarding its completion. At the end of this process, each student counted his or her score and received the interpretation of results. There followed a discussion with each student individually, regarding the occupational personality type he or she may belong to, according to the questionnaire score.

2.5. The Data Analysis

The collected data was introduced and processed with SPSS 17.0, the Statistical Programme for Social Sciences. To reach the objectives, there were performed some descriptive analyses (means, mean differences, frequencies), the one-way analysis ANOVA, and other Post Hoc comparisons.

3. Results

In order to determine the differences between the 3 groups (Services, Natural Resources, Technics), we performed the one-way analysis of variance (ANOVA). The students' personality type scores obtained by the questionnaire completion were treated as dependent variables. The means and standard deviations of the personality type scores for the three groups are presented in Table 1. In addition, Table 1 presents the results of the one-way ANOVA analysis. According to these results, there were statistically significant mean differences across some dominant personality types and the 3 high school lines of studies.

Table 1. Mean, standard deviation and one-way analysis of variance on personality types

PERSONALITY TYPES	SERVICES MEAN (SD)	NATURAL RESOURCES MEAN (SD)	TEHNICS MEAN (SD)	F	p
Realistic	12(9.8)	8.60	7.3(9.6)	1.89	0.15
Investigative	16(9.6)	13(9.6)	12.7(10.1)	0.84	0.43
Artistic	16.6(10.6)	11.1(7.7)	11.2(9.4)	3.12	0.04
Social	21.7(8.1)	17.7(7.7)	18.02(9.7)	1.69	0.18
Enterprising	24.5(8.4)	19.5(8.6)	17(10)	4.83	0.01
Conventional	20.2(7.3)	14.5(8.8)	12.8(9.3)	5.13	0.00

In order to determine exactly the specific differences between the personality type scores got by the 3 groups of students which were questioned, and also to identify exactly the existence of some relationships between their personality types and their high schools' line of studies, we resorted to the Hochberg GT2 post-hoc comparison test.

The results point to the fact that there are no significant differences in scores for most of the personality types, considering the line of studies of the high schools they attended. Except for the Enterprising and the Conventional types, where we noticed some statistically significant differences at the first significance threshold ($p < 0.05$), as compared to the high school line of studies.

As we can notice, the highest significant difference appears for the Enterprising type of personality, which has a much higher frequency at the Services program of study (that is, Economic line of studies) in comparison with the Technics program. The second difference, which we may observe between all 3 investigated groups, refers to the Conventional personality type which has the highest frequency for the students belonging to the Services program of studies (Economics) and a less

significant proportion for those belonging to the Natural resources and the Technics programs of studies.

Table 2. Post-hoc comparisons on personality types

(I) PROGR AM	(J) PROGR AM	MEAN DIFFERENCE (MD) (I-J)					
		R	I	A	S	E	C
Services	Natural resources	3.39	2.95	5.55	4.01	4.99	5.72*
	Technics	4.61	3.21	5.45	3.74	7.52*	7.34*
Natural resources	Services	-3.39	-2.95	-5.55	-4.01	-4.99	-5.72*
	Technics	1.22	0.25	-0.09	-0.27	2.53	1.61
Technics	Services	-4.61	-3.21	-5.45	-3.74	-7.52*	-7.34*
	Natural resources	-1.22	-0.25	0.09	0.27	-2.53	-1.61

*significant at $p < .05$

4. Discussions

As students reach high school, their academic expectations intensify. Thus, “students often choose an academic path which has consequences not only regarding the next four years of high school education, but also regarding the future options related to work and studies following the graduation of high school.” (Akos, 2004, p.883 apud Spencer G. Niles & Jo Ann Harris-Bowlsbey, 2015, p.384). This transition towards high school is an opportunity for students to focus more upon their professional preferences and consistently clarify their career options. Our study emphasized a relatively limited relationship between the vocational personality type and the field of study chosen by the students attending the Technology line of studies. From the 6 occupational personality types, only two types (Enterprising and Conventional) registered statistically significant differences on the first significance threshold ($p < 0.05$), according to the lines of studies of the high school they attended. Those results may draw attention to many aspects, such as: the shortage of counseling and school and vocational orientation services; a deficiency in students’ knowledge and self-knowledge; the modality of selection for high schools; the need for the differentiated instruction of students (Tulbure, 2010). One of the workable and legitimate solutions would be an extension of vocational counseling services, increasing the role played by school in this process (Rarița, 2014) and their more frequent usage in pre-university education. The vocational and educational counseling services should display some core characteristics, such as: transparency, flexibility and innovation in offering individual services, in order to meet students’ differentiated needs (Jigău, 2007). Also, is very important to know that in order to achieve success in school activities we, the teachers, must rely on several factors, the most important being the pupils with all their personalities and psychological characteristics (Savescu et al., 2013). The study offers some opening views within the area of professional counseling and orientation for the high school students coming from rural areas, for their parents, and also for their teachers in pre-university and higher education.

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Dynamics of the factors influencing high-school students' level of happiness in the school environment

Tatiana-Gabriela Pescaru (Marinescu)^{a*}

^a*Petroleum-Gas University of Ploiesti, 39 Bucuresti Blvd., Ploiesti, 100680, Romania*

Abstract

In the school environment, a student's level of happiness is measured mainly depending on school results and the quality of the social relationships the student develops. The current study is aimed at analyzing the dynamics of the factors influencing the high-school students' level of happiness in the school environment and to establish the level of happiness they perceive. As part of this survey, a number of 128 students aged between 15 and 19 attending two renowned high-schools in Ploiesti were selected. Two instruments were applied for better comprehension, namely: *The questionnaire concerning the factors that influence high school students' level of happiness in the school environment* and *The Subjective Happiness Scale*. Data collection and processing was done in Excel, depending on the following variables: gender, age and grade.

The results of this study show that it is necessary to develop and implement complementary programs based on positive psychology which have to promote happiness and mental health in school students in the long run. In this way, students will be able to experience more positive emotions, to develop effective relationships with others, to be engaged more responsibly in school, to reach their full potential development and assign a new meaning to their lives.

Keywords: high school; high school students; level of happiness; positive psychology.

1. Introduction

Education for health and particularly for students' mental health should be an integral part of education in all education establishments in our country. According to the World Health Organization (WHO), mental health is defined as "anatomic and functional integrity, the capacity to face physical, biological, psychological and social stress, the capacity to protect oneself against falling ill and premature death, as well as physical, psychological, social and spiritual comfort, as a state of wellbeing" (Vasile, 2014, p.103).

A school environment that pursues the promotion of a state of wellbeing and displays interest in students' mental health becomes an attractive environment, a positive learning experience, providing students with the opportunity of developing harmoniously and exercising their abilities. John Dewey considered that school "must provide a wide range of opportunities that can enhance student growth" (Stan, 2009, p.73).

Students' wellbeing is a sensible quality indicator for an educational establishment. Several years ago, a number of schools and high schools in Australia, France, Great Britain and Japan implemented the "wellbeing curriculum", which relies on the principles and results of positive psychology. Although initially regarded with scepticism, this system has proved to be beneficial for the students.

In Romania, the ever more frequent changes in the educational system have led to a decline in students' interest in and enthusiasm for school. That is the very reason why one should identify the factors influencing happiness levels in the school

* Corresponding author. Tel.: +0-000-000-0000 ; fax: +0-000-000-0000
E-mail address: tatiana1967_2007@yahoo.com

environment, so as to conceive and develop complementary educational programs meant to enhance motivation and interest in learning.

1.1. Students' happiness in the school environment

Happiness has always been an equally fascinating and controversial topic for the humanities. Freud (1930) stated that "human beings wish to be and stay happy. Happiness is the universal goal of life" (apud. Baumeister, 2011, p. 275).

Seligman (1995) stated that happiness has its roots in one's childhood and it is important that those who are involved in the educational act should find methods and means through which they develop positive thinking abilities in children, which would thereafter lead to an increased level of happiness in the latter and a drop in the number of cases of depression that make their debut in adolescence. Veenhoven (2000) spoke about subjective happiness, which refers to a positive assessment of the quality of life in general, as a whole (apud. O'Rourke and Cooper, 2010).

As far as the school environment is concerned, one can say that students' level of happiness is determined by a series of factors (Sadeghi, 2006, apud. Talebzadeh and Samkan, 2011). Happiness correlates positively with success, optimism, quality of life and self-efficiency (William and Graham, 2001, apud. Gatab and Pirhayti, 2012) and negatively with the stress perceived. Students who are happy get involved in school tasks, are confident in their own abilities, embark upon significant challenging activities, have a sense and purpose in life, feel accomplished and establish positive relationships with others. Also, it is less likely that they adopt maladaptive behaviour (Graham et. al., 2004, apud. Piqueras et. al., 2011). Unhappy students have difficulty in establishing and maintaining interpersonal relationships, they report a high level of distress and present reasoning distortions (Strack et. al., 1991).

At present, studies in the field of psychology point increasingly towards the importance of mental health and happiness. In this sense, starting from specialized literature and the conclusions of research studies, a Conceptual model for happiness in schools was put forward (Talebzadeh and Samkan, 2011). The new challenges and requirements of our times impose a change in mentalities and behaviour in the school environment. One should not forget that "we are going through a period of time when our relationships with children can be broken or strengthened" (Albu, 2008, p. 59).

2. Methodology

2.1. Objectives

The current study aims to analyze the dynamics of the factors influencing high school students' level of happiness in the school environment and establish the level of happiness they perceive, depending on the following variables: gender, age and grade.

2.2. Respondents

The batch consists of 128 students (grades 9th through 12th) in two renowned high schools in Ploiesti, whose ages range between 15 and 19 years old ($M = 16.6$ years old). Of these, 64 are of the female gender and 64 of the male gender.

2.3. Instruments

The following instruments were applied so as to carry out the current study:

a) The questionnaire concerning the factors that influence high school students' level of happiness in the school environment

Several factors influencing high school students' level of happiness in the school environment were identified when the questionnaire was conceived, but their number was reduced to 25, which were considered the most important. Each student was

supposed to select just 10 out of the 25, which they considered significant for themselves, and give them a score from 1 to 10, where 1 represents the lowest level of happiness, while 10 represents the highest.

b) The Subjective Happiness Scale

The Subjective Happiness Scale (SHS), developed by Lyubomirsky and Lepper (1999), allows for a determination of the level of happiness perceived by the respondents. It contains 4 items that can be statements and/or questions. For each of the items, the respondents must circle one of the 7 options, specifically the one they consider suits them. The options are different for each of the four items. The SHS does not have sub-scales.

2.4. Administration

The students who participated in the study were selected randomly. They were informed about the aim of the research and, at the same time, were assured of data confidentiality.

2.5. Data analysis

Statistical processing was done in Excel and the data obtained will be interpreted subsequently.

3. Results

3.1. Analysis of the factors influencing students' level of happiness

Administering the questionnaire allowed high school students to outline the 10 main factors leading to an increase in the level of happiness in school : decreasing the number of classes, homework elimination, reducing the number of tests, decreasing the number of students per grade (maximum 20 students), developing programs that promote health and prevent disease, organizing entertaining activities, organizing round tables to debate topics of interest with personalities in various fields, positive relationships with teachers and fellow students, teachers' competence and providing school counseling/social assistance services.

The students estimate that there are a series of factors influencing their level of happiness to an extremely small extent (involvement in educational projects, development of abilities, an encouraging support environment, possession of stress-management techniques, the introduction of optional courses, participation in workshops and adequate information transfer).

Both girls and boys consider that the decisive factors determining a high level of happiness are a decrease in the number of classes, of tests and of students per grade, besides homework elimination.

3.2. Analysis of the level of happiness perceived by the students in the school environment

Following the implementation of The Subjective Happiness Scale and data centralization for the whole batch, it has been concluded that 44.53% of the respondents are less happy in the school environment, 32.82% recorded an average score, while 22.65% of them are happier.

As can be noticed from table 1, the level of happiness perceived by the high school students in the school environment varies depending on gender, age and grade.

The results show that 72% of students in the 9th grade and 64% of students in the 11th grade are less happy and a very small percentage of these, 8% and 4% of students are happier in school, which is worrying.

Table 1. Results obtained as a result of applying The Subjective Happiness Scale

Level of happiness perceived	Girls (%)	Boys (%)	Grade 9 (15-16 years old) (%)	Grade 10 (16-17 years old) (%)	Grade 11 (17-18 years old) (%)	Grade 12 (18-19 years old) (%)
Less happy	43.75	45.31	72	31.37	64	25.93
Average score	32.81	32.81	20	33.33	32	44.44
Happier	23.44	21.88	8	35.30	4	29.63

Correlating the data obtained as a result of applying both instruments, it results that the students feel pressured by the large number of classes, by the homework they receive, the tests/examinations they have to take, as well as the large amount of information that needs to be assimilated. Also, some of these students point out the fact that the relationships teacher-student and student-student are not always effective, considering that school counselling services are necessary. Thus, the effects do not cease to appear: indifference towards school and teachers, a drop in motivation for learning, a decrease in school success, an increase in the level of distress perceived, low self-esteem, anxiety, etc.

An alarm signal could also be drawn by the case of a 17-year-old female student in the 11th grade who scored just one point in the SHS. Having examined the factors that influence happiness levels, one can notice that she scored highest in the factor referring to the implementation of programs aimed to promote health and prevent disease. The student may not necessarily be unhappy, but face a medical issue (without excluding the version in which she might be suffering from depression). For these very reasons, a detailed and accurate investigation of the factors determining the level of happiness should be performed, in order to create the prerequisites needed for the students' mental health and happiness in the school environment.

4. Discussions

The changes that have occurred in the educational system over the past years permanently require students' adapting to the ever higher requirements imposed by the decision factors. The latter fail to consider students' wishes, needs and expectations and believe that what they are doing is to the students' interest. Therefore, certain questions obviously arise: "Are students happy?"; "What can schools do to have happy students?"

With these questions in mind, I have considered it important to analyze the dynamics of the factors influencing students' level of happiness in the school environment and to establish the level of happiness they perceive. The results obtained point to the conclusion that it is highly necessary that school curricula should be revised, that the education process should be reconsidered by creating a pleasant, attractive, motivating school environment which promotes the principles and results of positive psychology. This would contribute towards students' increased interest in school and the values it promotes, school success, experimenting more positive emotions and the prevention of dysfunctions.

The research also had its limits, such as: the impossibility of the cross-sectional study to provide a detailed analysis, the limited number of high schools involved and the teachers' reticence in allowing the distribution of the survey instruments among students for the latter to fill in.

The issue under discussion is extremely topical and provides new perspectives for research. It would be interesting if such a survey were carried out both among middle school students and among teachers. To sum up, now more than ever before school has to take into consideration the mental health of its students and be concerned about their happiness. Students' happiness can be a significant goal for each and every individual school. Only when one has become familiar with the factors contributing to

students' happiness in schools can one understand what exactly is suitable for them. In our haste "to always do something for students", we forgot, or it didn't even occur to us "to do something in order that they become happier at school"...

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Maladaptive schemas in adolescence

Cristian Vasile*

Petroleum Gas University of Ploiesti, Bd. Bucuresti, nr. 39, Ploiesti, 100680, Romania

Natural Sciences Museum, Prahova County, Ploiesti, Romania

Abstract

The adolescence is a very sensitive period: the childhood issues start to manifest (if any) and the pressure of adulthood is bigger and bigger. The emotional balance of the adolescent is influenced by the quality of the family environment with all its components. One of the major problems at this age consists of maladaptive schemas, seen as core beliefs.

The study has been conducted on a 40 adolescents sample (high school), tracking the maladaptive schemas dynamics and the correlation of maladaptive schemas with various factors.

Keywords: maladaptive schemas; cognitive theory; adolescence; psychopathology

1. Introduction

The cognitive theory suggests that negative basic beliefs about the self, about other people and their worlds, also denoted as maladaptive schemas, underlie the development and maintenance of emotional disorders (J. S. Beck, 1995). Dysfunctional schemas are developing in early life, the subject internalizing in a dysfunctional way the negative interactions with primary caregivers, and causes people to become vulnerable when stressful situations occur.

Jeffrey Young originally outlined 15 different maladaptive schemas, which can be grouped within five domains. Later various diagnostic approaches have used Young's theory in order to explain various psychological disorders.

Researchers have used Young's theory to characterize the cognitive vulnerability in adults with various forms of psychopathology, such as depression (Shah & Waller, 2000), , eating disorders (Unoka, Tolgyes, & Czobor, 2007; Waller, Ohanian, Meyer, & Osman, 2000), alcohol and drug abuse (Brotchie, Meyer, Copello, Kidney, & Waller, 2004), anxiety (Pinto-Gouveia, Castilho, Galhardo, & Cunha, 2006) and personality disorders (Jovev & Jackson, 2004; Petrocelli, Glaser, Calhoun, & Campbell, 2001).

Beck suggests that the experience of negative parenting and abuse could lead to the development of a rigid and complex set of negative beliefs about the self, world, and future that are enduring and resistant to change (Lumley and Harkness, 2007).

Various studies suggest that the maladaptive schemas in adolescence are related to different psychopathological symptoms (table 1- taken from Muris, 2006).

The maladaptive schemas are characterized by:

- They develop in childhood as a result of the interaction between temperament and the daily negative experiences that arise in the child's relationship with close relatives;
- They are responsible for generating a strong emotional distress, resulting in adverse consequences for the person or those around;
- They prevent the development of autonomy, self-expression, acceptance and good interrelation;

* Corresponding author.

E-mail address: clinical_psycho@yahoo.com

- They are basal beliefs, deep rooted patterns, and central themes of the self and self-perpetuated;
- They are activated by daily events congruent with schemes or a biological state.

Table 1. Correlations between maladaptive schema scales and psychopathological symptoms (Muris, 2006)

YSQ-A	PQY-S				
	Depression	Anxiety	Disruptive behaviour	Eating problems	Substance use
Emotional deprivation	0.30*	0.39*	0.24	0.34*	0.23
Abandonment	0.50*	0.54*	0.20	0.38*	0.11
Mistrust/abuse	0.53*	0.49*	0.29*	0.31*	0.14
Social isolation/alienation	0.47*	0.44*	0.34*	0.43*	0.15
Defectiveness/shame	0.56*	0.48*	0.33*	0.38*	0.24
Social undesirability	0.59*	0.48*	0.27*	0.39*	0.13
Failure to achieve	0.52*	0.43*	0.40*	0.33*	0.34*
Dependence/incompetence	0.46*	0.36*	0.41*	0.15	0.30*
Vulnerability to harm/illness	0.43*	0.44*	0.21	0.22	0.19
Enmeshment	0.44*	0.39*	0.11	0.17	0.19
Entitlement/grandiosity	0.43*	0.40*	0.39*	0.20	0.23
Insufficient self-control/discipline	0.33*	0.34*	0.36*	0.28*	0.20
Subjugation	0.52*	0.43*	0.14	0.26*	0.27*
Self-sacrifice	0.37*	0.32*	0.00	0.31*	0.11
Emotional inhibition	0.58*	0.56*	0.24	0.32*	0.17
Unrelenting standards	0.49*	0.41*	0.06	0.35*	0.05

N = 173. YSQ-A = Young Schema Questionnaire for Adolescents, PQY-S = Psychopathology Questionnaire for Youths-Short version.

**p* < 0.001.

2. Methodology

2.1. Objective

The research objective was to track the dynamics of maladaptive schemas in the studied sample and to discuss different quantitative and qualitative correlations.

2.2. Participants

The main sample of the study was composed of 40 high-school students in Prahova County, Romania, 20 girls and 20 boys aged between 17 and 24 years.

2.3. Instrument

For this study YSQ-3, short form was used. Data mining was also used for gathering information about adolescents' family, relations and so on.

2.4. Procedure

The study sample has been informed about the research objective and instructed about the specific questionnaires. After the instruments were applied, data were collected together with other information (data mining) and processed.

3. Results

From the figure 1 we can observe that the emotional deprivation (ED) in the studied sample is high and there is a direct correlation between boys and girls.

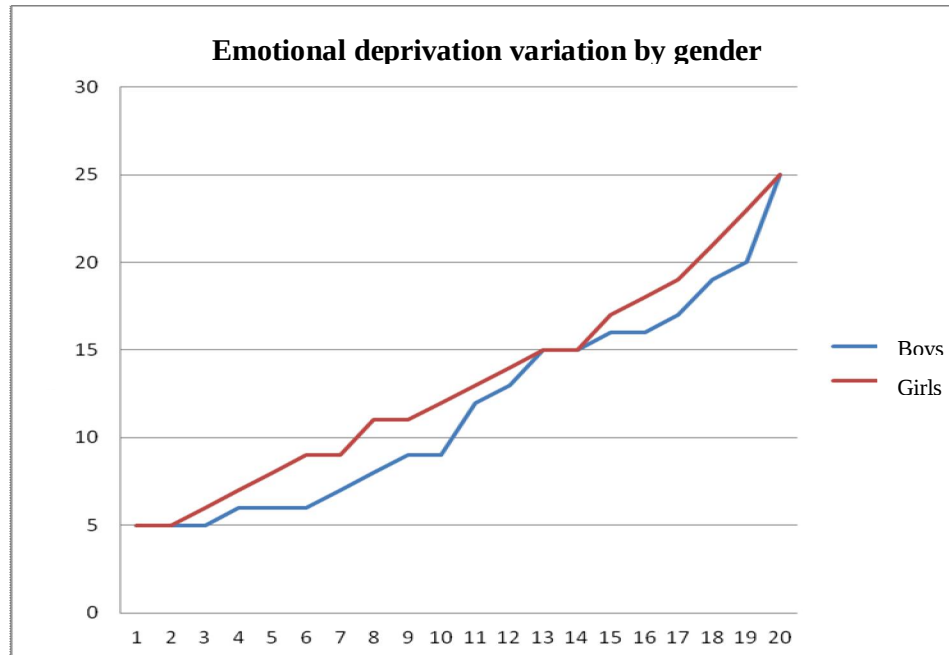


Fig. 1. Emotional deprivation in adolescents

The high ED in the study group suggests that various negative intra-familial factors, behaviours, feelings affected the subjects and this frame was a basis for ED.

Also we have found high scores at “unrealistic standards factor” (US) which indicates, again, family issues. (fig. 2).

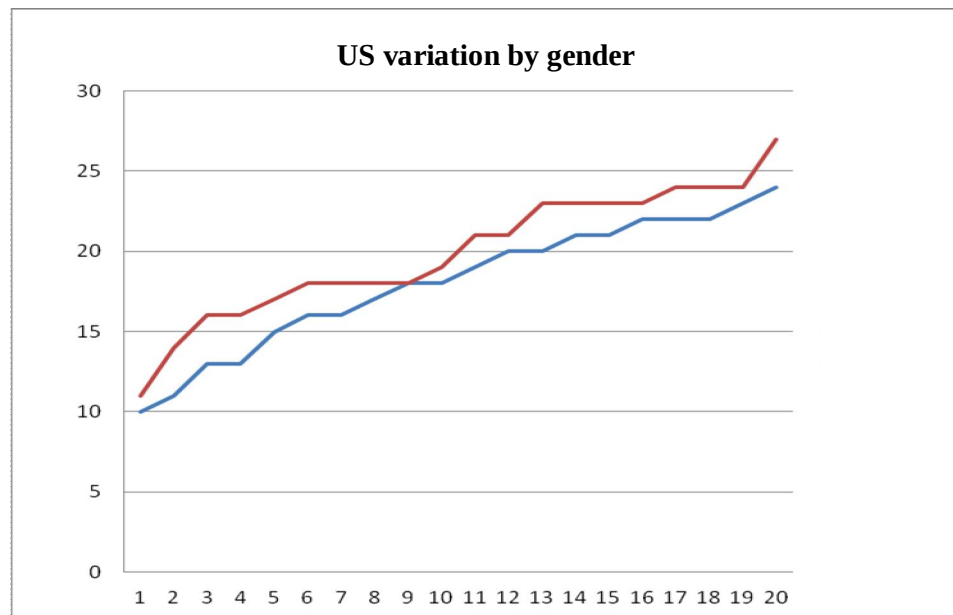


Fig. 2. Unrealistic standards in adolescents

4. Discussions

The maladaptive schemas in adolescence affect seriously the personality development and effective social relationship for both the subject and others. There is various evidence form studies indicating the direct correlation between early maladaptive schemas and social functionality in adulthood. Emotional deprivation and unrealistic factors are directly related to disorders such as anxiety and depression.

The study is only a part of an extensive research and tries to catch a part of the bigger picture of maladaptive schemas.

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Psychological well-being and the big five personality traits. study of a group of technical students

Beatrice Adriana Balgiu^a, Beatrice Gabriela Coteț^{a*}

^aUniversity Politehnica of Bucharest, Splaiul Independenței, 313, Bucharest, România

Abstract

The present article envisaged the evaluation of the psychological well-being of a group of technical students (N = 176) and the examination of the relationship between the latter and the personality traits. To this purpose we used the questionnaires *Short psychological well-being* – (SPWB) based on the model developed by Ryff and Singer and *Big Five Inventory-10* (BFI-10). The correlational analysis and the regression analysis were applied for the evaluation of the data. The results show that the respective students are characterized by a high sense of personal development and a positive attitude towards themselves. Statistically significant relationships were established between all 5 personality factors and various dimensions of the psychological well-being such as self-acceptance, control of environment, personal growth and interpersonal relations. The regression analysis shows that personality traits represent 31% of the variation of the total score of psychological well-being, which suggests that healthy personality traits can enhance psychological well-being.

Keywords: psychological well-being; big five personality traits; students.

1. Introduction

The optimal psychological functioning or well-being represents an important indicator of the life quality of the students who face numerous stress factors as early as the beginning of the academic environment, factors ranging from the adaptation to new ways of learning and testing to the frustration at having too little free time. Well-being, described as a desirable psychological state (Siegrist, 2003), is a purpose for most individuals, especially for the students who have barely started their professional life. From the perspective of positive psychology, it was studied both under a subjective form (the global perception of emotions and the quality of intellectual life), as well as psychologically (focused on the perception of success in the confrontation with life challenges).

One of the conceptualizations that became paradigmatic in the studies on well-being is Ryff and Singer's model (1998), which describes psychological well-being (PWB) as a six-dimension construct, namely:

1. Self- acceptance involves positive self-assessment of one's past and present life: High scorers: Possess a positive attitude towards themselves; acknowledge and accept multiple aspects of themselves, including good and bad qualities; Low scorers: Feel dissatisfied with themselves; are disappointed with what occurred in the past; are troubled about certain personal qualities;

2. Positive relationship with other people refers to the ability to develop good, warm relations with the people around. High scorers: Have warm, satisfying, trusting relationships with the others; are concerned about the welfare of the others; capable of strong empathy, affection, and intimacy; Low scorers: Have few close, trusting relationships with the others; find it difficult to be warm, open, and concerned about the others; are isolated and frustrated in interpersonal relationships;

3. Autonomy involves the feeling of independence and self-determination. High scorers: are self-determining and independent; able to resist social pressures to think and act in certain ways; regulate behavior from within; Low scorer: are concerned

* Corresponding author. Tel.: +0-000-000-0000 ; fax: +0-000-000-0000
E-mail address: beatrice.balgiu@upb.ro, beatricebalgiu@yahoo.com

about the expectations and the evaluations of others; rely on the judgments of the others to make important decisions;

4. Environmental mastery expresses the feeling of control over events. High scorers: Have a sense of mastery and competence in managing the environment; control a complex array of external activities; make effective use of surrounding opportunities; Low scorers: Have difficulty managing everyday affairs; feel unable to change or improve the surrounding context;

5. Purpose of life involves the feeling that life has a meaning. High scorers: Have goals in life and a sense of directedness; feel there is meaning to their present and past life; hold beliefs that give a purpose to life; Low scorers: Lack a sense of meaning in life; have few goals or aims, lack sense of direction; do not see any purpose of their past life;

6. Personal growth expresses the feeling of continuous personal growth as a proactive being. High scorers: Have a feeling of continued development; see their self as growing and expanding; are open to new experiences; have a feeling that they realize their potential; Low scorers: Have a sense of personal stagnation; lack sense of improvement or expansion over time; feel bored with and uninterested in life.

2. The relation between psychological well-being and personality traits

PWB paradigm was analyzed in relation with other constructs such as resilience (Souri & Hasanirad, 2011; Sagone & De Caroli, 2014; Sumner, Burrow & Hill, 2015), life satisfaction (Ozpalat, Isgor & Sezer, 2012), adaptive coping strategies (Garcia & Moradi, 2013), personality traits (Schmutte & Ryff, 1997, Siegler & Brummett (2000), Garcia, 2011) etc.

The examination of the personality traits of those who display high PWB is essential due to the fact it offers pertinent information on the improvement of the individual psychological health. In a meta-analytical study carried out on 137 distinct personality constructs in correlation with well-being (WB) it was shown that personality traits are strong predictors of subjective well-being (DeNeve & Cooper, 1998). Another meta-analysis which was based only on the inventory NEO-PI resulted in correlations that are much more developed than the ones obtained by DeNeve and Cooper between the personality traits and WB (Steel, Schmidt & Schultz, 2008). In exchange, the relations between personality and PWB were assessed in a much smaller number of studies.

We will go on to refer to the results of research on the relation between the PWB and the Big Five personality traits. Thus, for example, early studies discovered significant relations between the Big Five personality traits and the PWB (Schmutte & Ryff, 1997). Thus, neuroticism, extraversion, and conscientiousness are predictors of the following PWB dimensions: self-acceptance, environmental control, and life purpose; openness to experience is a predictor of personal development, and agreeableness predicts positive interpersonal relations; finally, autonomy is predicted by neuroticism. Siegler and Brummett (2000) carried out a detailed analysis on the relations between the personality factors and their facets and the PWB within a sample of adults ($N = 2379$) and reached the conclusion that interpersonal relations are positively related to all the facets of extraversion and conscientiousness and negatively related to all the facets of neuroticism. Another research carried out on Australian managers found that extraversion, neuroticism, and conscientiousness correlate in a similar way both with the subjective state of well-being as well as with psychological well-being, suggesting that these traits represent general tendencies for the general state of well-being (Grant, Langan-Fox & Anglim, 2009). More recently, studying a sample of Swedish teenagers, Garcia (2011) found that neuroticism, extraversion, conscientiousness, persistence, and self-directivity have a highly positive relation with well-being. In addition, Sharon (2016) carried out a study on emerging adults by using Markers of Adulthood Scale and found that the most important marker for the PWB is relational maturity, perceived as the development of high consideration of others.

3. Methodology

3.1. Objective

- a. the evaluation of the psychological well-being of a group of technical students;
- b. the examination of the relation between the psychological being and the personality traits of the group of students analyzed with a view to identifying some key aspects which support and undermine PWB.

3.2. Participants and procedure

Participants and procedure: 176 technical students were randomly chosen (all from University Politehnica of Bucharest), with the age average $M = 18,99$ ($S.D. = 0,73$), out of which 112 men and 64 women with no significant difference regarding the age average. The questionnaire was administered at the end of a seminar class for 20 minutes, and the students were informed on the confidentiality of the results.

3.3. Instruments

1. Short psychological well-being – SPWB developed by Ryff and Singer (1998) is a self-report inventory with 18 items grouped in six subscales: Autonomy (“I believe in my own opinions even if they differ from others”); Environmental control (“I manage my day-to-day responsibilities well”); Personal growth (“For me, life was a continuous learning, growth, and development process”); Positive relationship with the other people (“People describe me as a person who likes spending time with others”); Life purpose (“Some people wander aimlessly in their life, but I am not one of them”) and Self-acceptance (“In general, I like most parts of my personality”). Every scale has 3 items (8 of them reverse) assessed on a scale from 1 – strongly disagree to 6 – strongly agree). van Dierendonck (2005) reports internal consistency coefficients of subscales from 0,61 to 0,83.

2. Big Five Inventory-10 – BFI-10 (Rammstedt & John, 2007), which measures personality factors within the Model Big Five on a scale of 1 – strongly disagree to 5 – strongly agree (Extraversion – the extent to which the individual is oriented towards the social sphere or towards him/herself; Agreeableness – the extent to which the individual is cordial, altruistic and interacts amicably with the people around; Conscientiousness – the extent to which the individual is responsible and oriented toward achievement; Neuroticism – the extent to which the individual is emotionally stable versus unstable; Openness to experience – the extent to which the individual is flexible and creative). The questionnaire is a reduced version of BFI 44 inventory (John, Donahue & Kentle, 1991) and it contains 11 items; 5 these items are quantified in reverse. The authors standardized the questionnaire by using 4 cross-cultural samples, and the scales of BFI retain significant levels of validity and fidelity. The validity coefficients of the questionnaire in the case of the test-retest are 0.72 and 0.78.

3.4. Data analysis

Data analysis: Descriptive, correlational and regression analysis was used.

4. Results and Discussions

The descriptive analysis of data is shown in Table 1. The comparison of the six dimensions of psychological well-being show that the respective group obtained high scores for the personal development ($M = 14,91$; $S.D. = 2,68$), self-acceptance ($M = 14,08$; $S.D. = 2,97$), environmental control ($M = 13,61$; $S.D. = 2,40$) and a moderate score for the life purpose ($M = 13,34$; $S.D. = 2,84$), while relatively lower scores are obtained for the dimensions autonomy ($M = 12,27$; $S.D. = 2,46$) and positive relations with others ($M = 11,74$; $S.D. = 2,97$) (fig. 1).

The analyzed group stands out due to high agreeableness and openness to experience, a good emotional balance and relatively moderate conscientiousness with gender differences in favor of the females of the group in the case of agreeableness ($t = -2,37$; $p = .018$), of conscientiousness ($t = -1,93$; $p = .054$) and neuroticism ($t = -1,86$; $p = .064$).

Table 1. Descriptive Indicators

Variables		M	S.D.	M	F
SPWB	Autonomy	12,27	2,46	12,34	12,16
	Environmental control	13,61	2,40	13,55	13,71
	Personal growth	14,91	2,68	14,88	14,96
	Positive relationship	11,74	2,97	11,64	11,87
	Life purpose	13,34	2,84	13,20	13,53
	Self-acceptance	14,08	2,97	14,15	13,89
BFI-10	Extraversion	7,21	1,75	7,47	6,89
	Agreeableness	8,56	1,49	8,37	8,90
	Conscientiousness	6,57	1,63	6,86	7,17
	Neuroticism	5,17	1,99	5,02	5,45
	Openness	7,42	1,65	7,45	7,35

Table 2 shows the direction and the significance of correlational interrelations. A percentage of 70 significant correlations were obtained out of the total of 30 possible correlations. The dimensions self-acceptance and personal growth within PWB and conscientiousness and agreeableness (from the factors of the Five Factors Model) made the highest number of correlations.

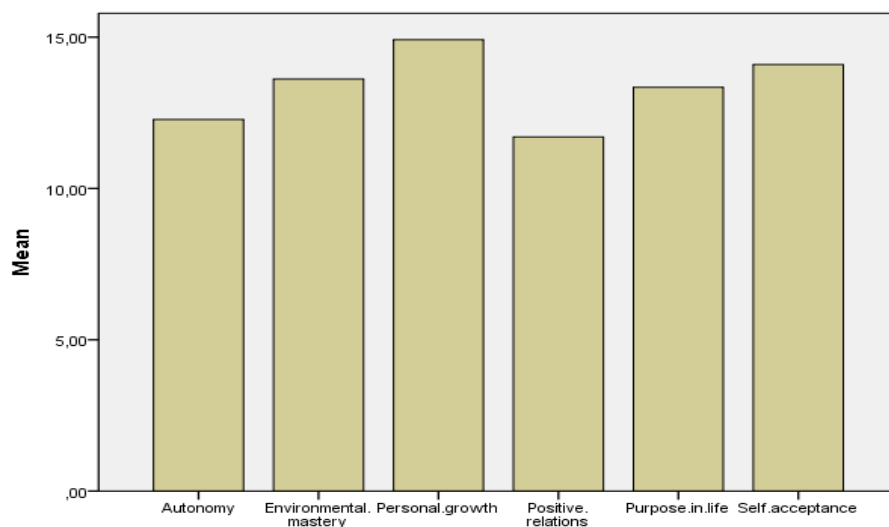


Figure. 1 Psychological Well-being (dimensions)

The factor extraversion correlated with the dimensions positive relationship with other peoples ($r = .29$; $p < 0,05$), self-acceptance ($r = .27$; $p < 0,05$) and personal growth ($r = .16$; $p < 0,05$); the factor agreeableness correlates with the dimensions environmental control ($r = .30$; $p < 0,01$), personal growth ($r = .24$; $p < 0,01$), positive relationship with other peoples ($r = .26$; $p < 0,01$), life purpose ($r = .18$, $p < 0,05$) and self-acceptance ($r = .23$; $p < 0,01$).

Table 2. Inter-correlation of variables

Variables	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
Autonomy	.12	.14	.01	-.11	-.02
Environmental control	.14	.30**	.38**	-.22**	.16*
Personal growth	.16*	.23**	.32**	-.15*	.28**
Positive relations	.29**	.26**	.20**	-.04	.11
Life purpose	.13	.18*	.03	-.12	.06
Self-acceptance	.27**	.23**	.27**	-.28**	.06
Total PWB score	.32**	.37**	.34*	-.27**	.19*

* Significant correlations to $p < 0,05$ ** Significant correlations to $p < 0,01$

Conscientiousness is in a relation with the parameters environmental control ($r = .38$; $p < 0,01$), personal growth ($r = .32$; $p < 0,01$), positive relations ($r = .20$; $p < 0,01$) and self-acceptance ($r = .27$; $p < 0,01$). Neuroticism is in reverse relation with environmental control ($r = -.22$; $p < 0,01$) and personal growth ($r = .28$; $p < 0,01$). The factor autonomy does not make correlations with any of the personality traits. The biggest correlation coefficient is obtained between conscientiousness and environmental control ($r = .38$ $p < 0,01$) and conscientiousness and personal growth ($r = .32$, $p < 0,01$).

In order to examine a deeper relation between PWB and personality we went on to conduct a linear regressions analysis from which we extracted the following model that has the total score of PWB (table 3) as a dependent variable. All the five factors introduced as predictors explain 31% of the PWB variation ($R^2 = .31$; $F = 15,426$; $p = .000$). The data we obtained showed us that the students' psychological well-being is predicted by the assembly of personality traits. This result was predictable because extraverted individuals, with a high degree of agreeableness, conscientiousness, and openness to experience are characterized by physical health, stress resistance, assertiveness, intellectual curiosity and they can get involved in work for long periods of time.

Table 2. Results of stepwise linear regressions

Model	R	R ²	Adjusted R ²	B	Sig.
Extraversion				.246	.000
Agreeableness				.236	.001
Conscientiousness	.563	.317	.298	.218	.001
Neuroticism				-.168	.014
Openness				.163	.013

a Dependent Variable: total score of PWB

Other two models were made for the two dimensions of PWB for which students obtained high scores: self-acceptance and personal growth in dependent variables. It results that the predictors of self-acceptance are extraversion ($\beta = .20$, $p = .006$), conscientiousness ($\beta = .25$, $p = .001$) and neuroticism ($\beta = -.21$, $p = .018$), and that personal growth is predicted in openness to experience ($\beta = .25$, $p = .000$), conscientiousness ($\beta = .28$, $p = .001$) and extraversion ($\beta = .16$, $p = .018$). The results are similar to those of prior studies (Schmutte & Ryff, 1997, Grant et al, 2009, Fayombo, 2010).

5. Conclusions

The study investigated the relation between the Big Five personality traits and PWB in the case of a group of technical students. The results show that the analyzed

subjects obtained high scores for two of the PWB dimensions: self-acceptance and personal growth. The PWB dimensions “the positive relations with the others” and “autonomy” are less developed. In the case of the latter, the low score is somehow natural for a group included in the category emerging adults (Arnett, 2015) and still dependent on the frames of thinking and action influenced by the education acquired in the family. As prior studies have also shown, personality traits are significantly, but moderately associated with PWB. The most strongly relation of total PWB score is realised with agreeableness, followed by conscientiousness and extraversion. Neuroticism correlates very negatively with PWB. It results that irritable individuals, who tend to be anxious, are much less likely to reach high levels of WB.

The final purpose of the investigation consisted in discovering the combination of personality characteristics that could contribute to PWB. The results show that PWB (the total score) is predicted by all personality factors, the most important contribution being brought by extraversion and conscientiousness. Data show that extraverted, considerate, responsible, emotionally balanced and creative individuals have a strong chance to reach high levels of PWB. The best predictors of PWB are extraversion and conscientiousness. This is not surprising because extraverts are characterized by enthusiasm, energy, assertiveness and they can benefit from the support they get from the group. In addition, conscientious individuals are organized and perseverant, they have the strength to find strategies regarding their personal development and to control the context in which they find themselves or to create new contexts which should correspond to personal needs.

The study shows that health personality traits can support PWB, while neuroticism can deteriorate it. In fact, Schumutte and Ryff (1997) stated that there are two essential conditions that make WB accessible to any individual, namely extraversion and non-neuroticism. Further research can be conducted to predict students' WB by other personality traits not covered by the Big Five personality traits, to further expand the existing literature. The results are important for university teachers who must capitalize on the students' need of personal growth (the highest dimension of students' wellbeing) and to develop their ability to manage interpersonal relations based on harmony and trust in others, on authenticity. At the same time, in order to promote WB, it is important for educational programs to help students become aware of their professional and relational goals, as well as those related to their personal development. This may happen by directing students towards domains they fit, on the one hand, and by training them for the management of interpersonal relations, on the other hand. Last, but not least, if the whole array of healthy traits can enhance PWB, then one needs to harmonize all their personality traits.

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Unconditional self-acceptance and self-esteem in adolescence

Cristian Vasile*

Petroleum Gas University of Ploiesti, Bd. Bucuresti, nr. 39, Ploiesti, 100680, Romania

Natural Sciences Museum, Prahova County, Ploiesti, Romania

Abstract

Unconditional acceptance refers to a general attitude to oneself, to those around the subject, and to life. According to the literature, in contact with various negative moments in an individual's life, the unconditional acceptance can be a protective way that prevents the triggering of some psychopathological manifestations. Also, rational beliefs are positively associated with unconditional acceptance.

Adolescence is a sensitive period when the unconditional acceptance has variations and involves sometimes psychological disorders.

Keywords: unconditional acceptance; self-esteem; adolescence

1. Introduction

Ellis and Rogers have suggested that conditional self-worth is associated with psychological distress, but unconditional self-acceptance is a condition that fosters personal adjustment and well-being (Flett, Davis, and Hewitt, 2003).

The lack of ability to unconditionally accept the self sometimes extends to an inability to accept other people. Ellis (2002) related the case study of John, a 36-year-old accountant who demanded perfection from himself and others. Ellis observed that John was: *"equally perfectionistic about his wife Sally and his two accounting partners. They, too, had to—yes, had to—perform well, dress well, and even play tennis well. And often they didn't, those laggards! John, of course, couldn't control others as he strove for his own perfection, so he was frequently enraged against his "careless" wife and partners, much more than he was anxious about his own performances."* (Ellis, 2002, p. 225).

According to Flett, Davis and Hewitt, the unconditional self-acceptance is related to self-oriented perfectionism, socially prescribed perfectionism, other-oriented perfectionism and depressive symptoms (fig. 1).

Other studies suggested that there is a direct relation between self-acceptance and mindfulness (Thompson and Waltz, 2007).

Some studies indicated that socially prescribed perfectionism is linked with a contingent self-worth, as a consequence those high in this disposition often have difficulty accepting themselves in the absence of approval from others (Hall et al., 2009).

Ryan and Brown (2003) suggested that the concept of mindfulness is a healthier alternative to self-esteem. Mindfulness involves adopting an attitude of non-judgment towards the moment-to-moment unfolding of one's experience (Bishop et al., 2004; Kabat-Zinn, 2003; Martin, 1997).

* Corresponding author.

E-mail address: clinical_psycho@yahoo.com

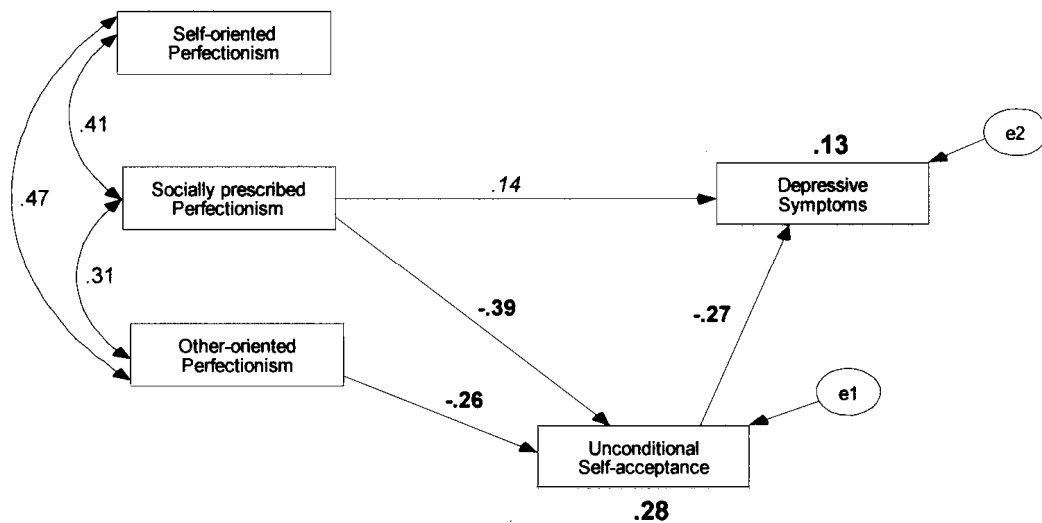


Fig. 1. Unconditional acceptance vs. other factors (Flett, Davis, and Hewitt, 2003)

2. Methodology

2.1. Objective

The objective of the study was to evaluate and track the dynamics of unconditional self-acceptance and self esteem in adolescence.

2.2. Participants

The instruments have been used on 40 adolescents (15-18 y.o.), 20 girls and 20 boys.

2.3. Instrument

Unconditional Self-acceptance Questionnaire (USAQ) and ZKPQ personality questionnaire have been used in the whole study.

2.4. Procedure

The study sample has been informed about the research objective and instructed about the specific questionnaires. After the instruments were applied, data were collected together with other information (data mining) and processed.

3. Results

Regarding the unconditional self-acceptance, it can be observed that the boys have a higher level of self-acceptance than the girls (fig. 2). Thus, a high level of self-esteem can lead to achievement and productive relationships. Individuals are usually positive people who act in an effective way, characterized by perseverance. These people are emotionally stable, displaying a positive and realistic attitude. Also, high self esteem is associated with increased self-esteem (fig. 3, 4).

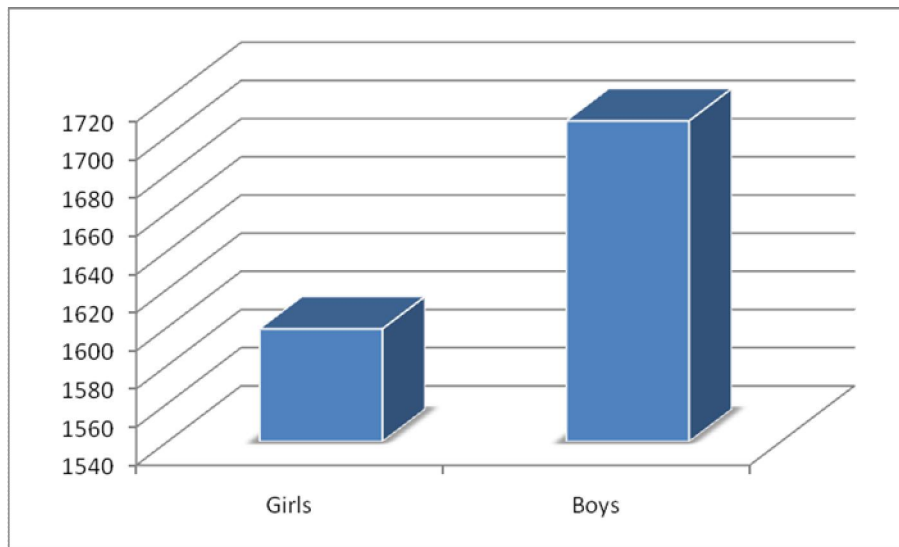


Fig. 2. Unconditional self-acceptance: girls vs boys

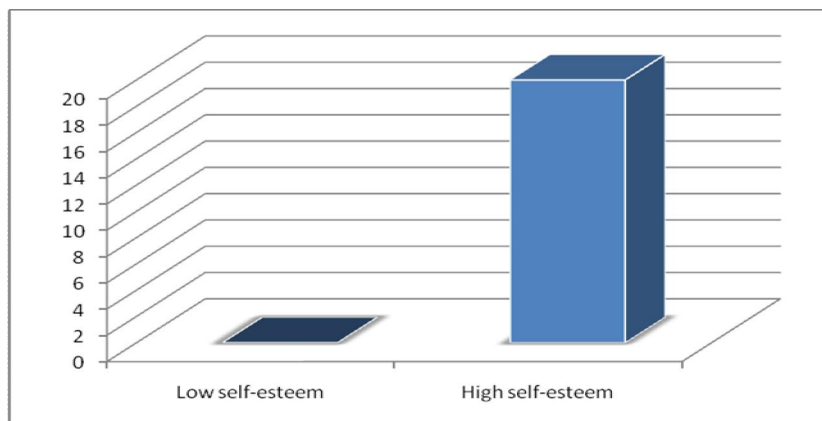


Fig. 3. Boys self-esteem

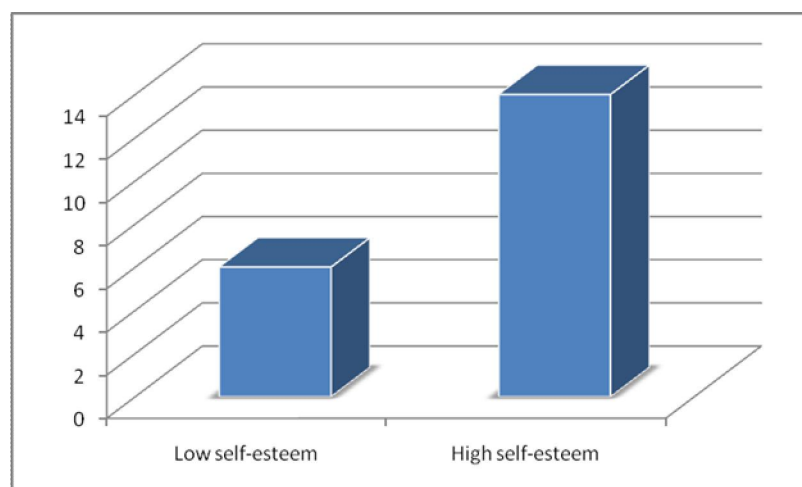


Fig. 4. Girls self-esteem

4. Discussions

The majority of adolescents in the above sample, both boys and girls, score 70-100 points, which means that adolescent self-esteem is in the level of normality. From these observations it follows that the psychological functioning of the subjects is at a balanced level. Thus, their self-image is neither very low nor very high, but within the normal limits.

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Analysis of the psychometric properties of the Maximization Scale on a Romanian student sample

Cristina Corina Bentea^{a*}

^a*Dunarea de Jos University of Galati, Galati, 800008, Romania*

Abstract

The Maximization Scale (MS) (Schwartz et al., 2002) is a 13-item instrument that measures people's tendencies to maximize or satisfice. The purpose of the present paper was to analyze the psychometric properties of the Maximization Scale on a Romanian student sample. Exploratory and confirmatory factor analyses were performed in order to test the factor structure of the scale. EFA revealed a three-factor solution that explained 49.95% of the total variance. CFA indicated that the one-factor and three-correlated factor models produced an adequate fit to the data with better fit of the single factor model. Also, results indicated poor or acceptable reliability for the MS and its subscale, and low inter-correlations of the three factors. Concerning the criterion-related validity were examined the correlations with regret, life satisfaction, self-esteem, self-efficacy and self-regulation variables. Were found significant correlations of the MS and the three factors with regret, self-esteem and self-regulation, with except high standards that was not significant related to self-regulation. Life satisfaction had no correlations with MS and correlated negatively with decision difficulty. Also, self-efficacy positively correlated with alternative search and high standards and negatively with decision difficulty. The results concerning the measurement properties (factor structure, reliability, and validity) of the Maximization scale and the aspects concerning the unidimensional or three dimensional nature of maximization construct were discussed.

Keywords: Maximization scale; exploratory factor analysis; confirmatory factor analysis; psychometric properties.

1. Introduction

The maximizing and satisficing are key concepts in the decision-making literature. The constructs were derived from Simon's theory of bounded rationality (1955, 1956) whereby he postulated the idea that decision makers are seeking satisfactory or "good enough" alternatives rather than optimal solutions. His fundamental assumption is that people actually have in choice situations the goal of "satisficing" rather than maximizing. This choice strategy is incompatible with the rational model of decision making because is more adequate and realistic as compared to utility-maximizing based option. Starting from Simon's research (1955, 1956), Schwartz et al. (2002) conceptualized the individual differences in maximizing versus satisficing as global behavioral dispositions. They described "maximizers" as people who always pursue the best possible options in choice situations and spend more resources and effort to find a better solution than the best one found so far. As against "maximizers", "satisficers" generally attempt to achieve a satisfactory or "good enough" solution. Schwartz, Ward, Monterosso, Lyubomirsky, White, & Lehman (2002) developed the 13-item Maximization Scale (MS) as a measuring instrument for the construct of maximization and found that the scale has three component subscales which measure the characteristics of maximizers: difficulty to search among various alternatives, difficulty to decide in situations with a large numbers of options, and having high standards both for oneself and things in general. The first factor consists of six items

* Corresponding author. Tel.: +0_072 321 3440; fax: +4-023-632-1307.
E-mail address: cristina.bentea@ugal.ro

(e.g., “When I watch TV, I channel surf, often scanning through the available options even while attempting to watch one program.”), the second factor includes four items (e.g., “I often find it difficult to shop for a gift for a friend”), and the third factor is composed of three items (e.g., “No matter what I do, I have the highest standards for myself”). Also, they examined the relations between scores on Maximization Scale and Regret Scale and several psychological variables and found that maximizers appeared to be less happy and optimistic, more perfectionist, inclined to engage in upward social comparison, experience less self-esteem, more regret, depression and feel less life satisfaction and psychological well-being than satisficers (Schwartz et al., 2002).

The psychometric properties of MS have been examined by researchers in attempting to provide a reliable support for the maximizing versus satisficing construct. Nenkov and colleagues (2008) questioned the factor structure, reliability, and validity of the Schwartz et al.’s (2002) original scale, through conducting a confirmatory factor analysis which revealed that the three subscales, as factors of maximizing, did not always fit the data well and some items of the scale had low factor loadings (below .50) and loaded on to more than a single factor. Nenkov et al. (2008) concluded that MS has reasonable internal consistency and construct validity and emphasized that MS is multidimensional. They labeled the three dimensions: the “alternative search” factor which measures the tendency to expend resources to explore all possible possibilities, the “decision difficulty” with reference to the difficulty of making choices among plenty of alternatives, and the “high standards” factor that reflects individual’s tendency to maintain superior standards for themselves and things in decision-making situations. Further, Nenkov et al. (2008) developed three shorter refined versions of the scale consists of nine, six and three items, one of these (6-item reduced scale) with better psychometric properties as compared to the original 13-item Schwartz et al. (2002) scale. Also, they found that the three dimensions of maximization may be differentially related to different psychological traits. Other previous studies on MS examined the relations between scores on maximization subscales and scores on criterion variables measuring regret, optimism, subjective happiness, psychological well-being (Schwartz et al., 2002; Nenkov et al., 2008; Diab et al., 2008; Purvis, Howell & Iyer, 2011).

Further, other researchers have questioned the nature of maximization as multidimensional versus unidimensional construct. Diab et al. (2008) defined it as tendency to pursue the optimal alternative (p. 365) and contributed to development of alternative measures of maximization as unidimensional construct. They elaborated the Maximizing Tendency Scale (MTS) as an instrument with better psychometric properties. Their results revealed that MTS scores did not correlate with life satisfaction, neuroticism, avoidance, and indecisiveness depression but positively correlate with regret. Rim et al. (2011) used both exploratory and confirmatory factor analysis in order to reassess both the MTS and MS factor structure. Results indicated that the MS does measure three separate factors, but only two of them (alternative search and decisional difficulty) are correlated with each other and (negatively) with indices of well-being. They suggested that high standards factor is likely not a dimension of maximizing construct. Also, MS was strongly positive correlated with well-being, self-esteem and self-efficacy. Weinhardt et al. (2012) extended Rim et al.’s research (2011) and examined both the MS and MTS. They used exploratory and confirmatory factor analysis to determine their dimensionality and then applied polytomous IRT in order to test item information parameters that each item contributes to the maximizing construct. For the purpose to increase the reliability and construct validity of the measures, they removed low information items from each scale and then re-examined their factor structure to achieve revised scales, more parsimonious versions that have better psychometric properties. Lai (2010) proposed a modified valid maximizing scale, with adequate psychometric properties that correlated positively with optimism and need for cognition, self-efficacy but not with regret. Also, results indicated no correlation between the individual maximizing tendency and the item reflecting decision difficulty suggesting that decision difficulty should be not a dimension of maximizing construct. Also, Turner et al. (2012)

developed new measures of the decision difficulty and alternative search dimensions completed by a measure of satisficing. The Maximization Inventory has better psychometric properties when compared to the original MS (Schwartz et al., 2002). They examined its relationships to other maximizing dimensions and to measures of well-being and found that the decision difficulty and alternative search scales are positively correlated with similar previous constructs while indicate that satisficing can be reliably measured separately from the other two, and that it is positively correlated with indices of well-being and decision making styles.

2. Methodology

2.1. Objective

Based on the previous research on the nature, measurement, and relationships of the maximization construct, the purpose of the present paper was to analyze the psychometric properties of the 13-item Maximization Scale (Schwartz et al., 2002) on a Romanian student sample.

2.2. Participants

The sample consisted of 369 Romanian participants, 80 males and 289 females, 254 from urban and 115 from rural environment, with ages ranged from 18 to 60 (mean age=31.38, SD=9.94). Participants are undergraduate (105) and graduate students (264) enrolled in different license and master academic programs.

2.3. Instrument

The Maximization Scale (MS) (Schwartz et al., 2002), measures the tendency to maximize within decision-making situations. The 13 items of the scale are ratings on a 7-point Likert scale from 1 (completely disagree) to 7 (completely agree). The mean of the 13 items formed each participant's maximization score. Higher scores indicate a greater maximizing tendency versus satisficing tendency. Were also measured three dimensions of maximization: alternative search, decision difficulty and high standards (Nenkov et al., 2008). The 13-item MS (Schwartz et al., 2002) was administered in Romanian after translation and back translation procedure.

The Regret Scale (RS) (Schwartz et al., 2002) is designed to measure regret following a decision. RS is composed of five items that are rated on a 7-point Likert scale ranging from 1 (completely disagree) to 7 (completely agree). Higher scores indicate greater levels of post-decision regret. The reliability of the scale measured by Cronbach's alpha coefficient was .70.

The Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larsen, & Griffin, 1985) assesses individual's evaluation of the overall life satisfaction. The scale includes five items, such as "In most ways my life is close to my ideal" and "So far I have gotten the important things I want in life" which measures the extent to which an individual is satisfied with the current conditions in his or her life. The items are rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The sum of the items formed each participant's satisfaction with life score. Higher scores indicate higher levels of life satisfaction. Cronbach's alpha of the scale was .86.

The Self-Esteem Scale (SES) (Rosenberg, 1965) is a widely used self-report instrument for evaluating individual self-esteem. The 10-item scale assesses global self-worth by measuring both positive and negative feelings about the self. All items are answered using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The higher scores indicate higher global self-esteem. SE Scale was adapted on a Romanian sample. The internal consistency of the scale was .82.

The General Self-Efficacy Scale (GSES) (Schwarzer & Jerusalem, 1979) was designed to evaluate the general image of self-efficiency. The scale is comprised of 10 self-report items that measure self-beliefs about the ability to perform tasks required of problem solving and everyday adaptation. In contrast to other scales that assess

optimism, this one refers to the generalized belief that one's actions are responsible for successful outcomes. Perceived self-efficacy is a prospective and operative construct refers to the ability to cope with a variety of difficult demands in life. Responses are obtained on a 5-point Likert scale with items ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate higher levels of general perceived self-efficacy. GSES was adapted on a Romanian sample by Baban (1996). The internal consistency of the scale was .81.

The Self-Regulation Scale (SRS) (Schwarzer, Diehl & Schmitz, 1999) refers to self-regulation capacity in goal-pursuit situations when individuals face difficulties in maintaining and pursuing their action. The scale contains ten items which reflected the ability of focus attention and emotional regulation. Responses are rated on a 4-point Likert scale ranging from 1 (not at all true) to 4 (exactly true for me). The sum of the ten items formed participants' self-regulation ability. The internal consistency of the scale was .81.

The instruments were administrated to all participants with the exception of 23 participants who no completed SWLS. Participants with missing data on applied scales were removed from the samples. Participants received course credit for their participation.

3. Results

In order to test the dimensionality of the MS we performed an exploratory factor analysis (EFA) on the 13-items set ($KMO = .79$, Bartlett's test $p = .000$) using Principal Component Analysis, based on eigenvalues greater than 1 as extraction method with Varimax rotation. Variables with a main saturation greater than .30 and no secondary saturation greater than .30 were considered appropriate for interpretation. EFA revealed a three-factor solution that explained 49.95% of the total variance. Item 12 had loaded on to more than a single factor (cross loadings of .32 and .39).

Based on previous studies and according to the theoretical model underlying the MS, we generated other two separate EFA with one and two factors imposed to be extracted. We examined both factor solutions to understand how the individual items loaded on the factors. The one-factor solution has shown that all items loaded reasonably well on the factor (above .40) except item 5 with a factor loading of .33. Items 7, 6, 9, and 13 had factor loadings between .40 and .50. Finally, the two-factor solution explained 40.13% of total variance. Two of items (12 and 10) failed to load onto than a single factor. The estimated factor loadings for the three-factor model determined by the EFA are provided in Table 1.

Table 1. The factor loadings for 13-item Maximization Scale

	1	2	3	Item-Total Correlation
max3	.814			.532
max2	.773			.534
max1	.698			.431
max4	.582			.435
max8	.538			.417
max5		.739		.264
max7		.688		.386
max6		.662		.347
max9		.511		.330
max12	.392		.329	.486
max13			.817	.278
max10			.708	.443
max11			.603	.377

EFA results were followed by a confirmatory factor analysis (CFA), based on maximum likelihood estimation method, for the purpose to examine the obtained structures. Based on previous research concerning the nature of maximization as unidimensional or multidimensional construct (Schwartz et al., 2002; Nenkov et al., 2008), were tested three models: 1) a single factor model; 2) a three uncorrelated factor model; 3) a three correlated factor model.

The two-factor solution that resulted in over-factoring and insufficient factor loadings for two items was not regarded as acceptable and to be included in the confirmatory factor analyses. To evaluate model fit, were reported the following fit indices: the chi-square index, the Root-Mean-Square Error of Approximation (RMSEA) with its 90% confidence interval (CI) as an absolute fit index, the Goodness of Fit Index (GFI), the Normed Fit Index (NFI) and the Comparative Fit Index (CFI) as incremental indices, the Parsimony Adjusted CFI (PCFI) as parsimony comparative index. Values smaller than .06 for RMSEA indicated an adequate model fit, and similar conclusions can be stated for values greater than .90 for GFI, NFI and CFI indicators (Byrne, 2010). PCFI value indicates the model with higher value as more parsimonious. The confirmatory factor analysis fit indices are presented in table 2. Results have shown that the three uncorrelated factor model did not fit the data well for the maximization scale. The one-factor model and the three correlated factor model produced an adequate fit to the data.

Table 2. Results of the confirmatory factor analysis

Model	χ^2 (df)	p	RMSEA (90% CI)	GFI	NFI	CFI	PCFI
1-factor	132.35(56)	.001	.061 (.048-.074)	.94	.86	.91	.66
3 uncorrelated factors	258.08(63)	.001	.092 (.080-.104)	.90	.74	.79	.64
3 correlated factors	140.07(57)	.001	.063 (.050-.076)	.94	.86	.91	.66

CFA indicated a better fit of the single factor model than three correlated factor model with a significant difference in model-fit test between two models: $\Delta\chi^2(3)=7.73$, $p<.001$. However, the comparative fit indices we used are equal. The results might be better interpreted that the three factors of the model are dimensions of a high-order factor of maximizing. Unstandardized and standardized item loadings are presented for the three correlated factor model as components of maximizing (table 3).

Table 3. Unstandardized and standardized item loadings

Scale	Factors	Item	Unstandardized Loading	Standardized Loading
Maximizing (MS)	Alternative Search	1	1.05	.59
		2	1.28	.67
		3	1.36	.67
		4	.97	.52
		8	.98	.50
	Decision Difficulty	12	1	.53
		5	1.29	.51
		6	1.35	.56
		7	1.76	.63
		9	1	.41
	High Standards	10	1.58	.68
		11	1.05	.54
		13	1	.54

Reliability analysis yielded Cronbach's Alpha coefficients of .78 for the total scale, .75 for the Alternative search subscale, .60 for the Decision difficulty subscale, and

.60 for the High standards subscale. The correlations among the three factors and between the three factors and the total MS score were calculated in two ways: as summed scores and as factor scores (EFA). As summed scores, all correlations between the three factors were significant for $p < .001$: AS and DD ($r = .33$), AS and HS ($r = .41$), HS and DD ($r = .25$), and between the three factors and the MS total score: MS and AS ($r = .88$), MS and DD ($r = .68$), MS and HS ($r = .62$). As factor scores from EFA, the correlations between the subscales of the MS were .27 between AS and DD, .19 between DD and HS, .35 between AS and HS. For CFA, the correlations among the three dimensions were .34 between AS and DD, .20 between DD and HS, .40 between AS and HS.

No gender significant differences were found both in participants' total scores on the MS and in subscales' scores.

Concerning the criterion-related validity were examined the correlations both of the total MS and the three sub-dimensions with some external variables. Replicating the past studies, we examined possible correlations with regret, life satisfaction, self-esteem, and general self-efficacy variables. We extended the previous research by examining self-regulation as possible variable related to maximization and its components. Descriptive statistics and correlations between the total score of MS, the sub-dimensions scores, respectively and related psychological variables are provided in table 4.

Table 4. Correlations with psychological variables

mean	55.29	24.26	15.33	15.50
std. dev.	11.996	7.644	4.865	3.104
RS	.368**	.295**	.354**	.142**
SWLS	-.101	-.109	-.129*	.095
SES	-.212**	-.157**	-.339**	.098*
GSES	.035	.109*	-.206**	.190**
SRS	-.163**	-.067*	-.297**	-.001

** . Correlation is significant at the 0.01 level. * . Correlation is significant at the 0.05 level.

4. Discussions

After translation and back translation of the 13 maximization items (Schwartz et al., 2002) a series of EFA were performed to evaluate the factor structure of the MS. We considered only the single-factor and three-factor as suitable models for testing in the CFA. The three-uncorrelated factor model fit appreciably worse than the three-correlated factor solution. The one single factor model fit the data better than the three correlated factor model. One possible explanation aimed by other researchers (Diab et al., 2008) is that all items have a single common latent factor, maximizing as unidimensional construct, respectively. However, the similarity of other comparative fit indices we used seems to provide an adequate fit to the data for both models. Therefore, we considered that the results might be interpreted as good that the three correlated factors of the model are dimensions of one single maximizing factor. These results are in line with Schwartz et al.'s (2002) study concerning the fact that the maximizing construct should be a single high order factor with three sub-dimensions.

In our sample, the Alpha-Cronbach coefficient values for the two subscales of MS - decision difficulty and high standards - are below the generally accepted minimum of .70 for use in research (Nunnally & Bernstein, 1994), while the alternative search and MS total score show satisfactory internal consistency. Corrected item-total correlations for MS ranged from .26 to .53. Although internal consistency of the total MS is adequate, six of the 13 items had low item-total correlations between .30 and .40. For Alternative search subscale, the corrected item-total correlations ranged from .378 (item 12) to .61. For Decision difficulty subscale, item-total correlations ranged from .29 (item 9) to .44. For high standards subscale, the corrected item-total

correlations ranged from .37 (item 11) to .44. The inter-correlations of the three factors, calculated for EFA as factor scores, and for CFA as summed scores are low, especially those of decision difficulty and alternative search with high standards. The same results concerning the poor or acceptable reliability for the MS and its subscale, as low correlations between the three sub-dimensions of MS were reported by past studies too (Schwartz et al., 2002; Nenkov et al., 2008; Rim et al., 2011; Diab et al., 2008; Dalal et. al, 2015).

Analysis of the correlations with the related variables indicated significant positive correlations with regret both for the total scale and the three dimensions in the expected direction while only decision difficulty dimension negatively correlated with life satisfaction. MS total score had no correlation with life satisfaction, results which are inconsistent with those reported by Schwartz et al. (2002). Also, MS, alternative search and decision difficulty were negatively correlated with self-esteem and self-regulation. High standards factor had very low positive correlation with self-esteem and no significant correlation with self-regulation. Self-efficacy correlated positively with alternative search and high standards scores and negatively with decision difficulty. Maximizers' difficulty to seek out all possible options, reflected in the alternative search dimension, may be associated both with lowest self-esteem and low self-regulatory behavior, but with self-beliefs about ability to perform in their searching actions. Also, maximizers' difficulty of making choices among plenty of alternatives is related with low self-esteem, low ability to regulate their thoughts, feelings, and overt actions, low self-beliefs that their actions are responsible for successful outcomes and high regret. Regarding high standards factor, it seems that maximizers' tendency to maintain superior standards is positively associated with self-esteem, self-beliefs about their ability to perform in decision-making situations, and tendency to experience regret, although it does not significant decrease the life satisfaction. However, all these reported correlations were low to medium in effect size.

5. Conclusions

The present paper aimed to analyze the psychometric properties of the 13-item Maximization Scale (Schwartz et al., 2002) on a Romanian student sample. Our results are in line with several published studies which have examined the factor structure, reliability, and validity of both the total MS and subscales, although some difficulties remain. The first questionable aspect for further research is concerning the nature of maximization as unidimensional or three dimensional construct. The results might be better interpreted that the three factors of the model are dimensions of a high-order factor of maximizing. The second disputable aspect, derived from the low observed inter-correlations between the three factors, is that all these factors can be conceptualized as dimensions of a general maximization factor. The third questionable aspect aims the improving the content validity of the 13-item maximizing scale on other Romanian samples by removing items with relatively low or inconsistent factor loadings. Finally, taking into account the relationships between the total scale, its three components and external psychological variables, the extending of the criterion measures in further studies would improve the validity of the 13-item MS and would contribute to a better understanding of the maximization construct.

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Nevroglya and superior cognitive functions. Antidepressants and neuroplasticity

Simona Trifu^{a*}, Daniela Andronache^b, Alexandra Gagiuc^c, Arina Cipriana Trifu^d

*a*UMF "Carol Davila", 37 Dionisie Lupu Str., 020021 Bucharest, Romania

*b*Titu Maiorescu University, 187 Calea Văcărești, 004051, Bucharest Romania

*c*University of Bucharest, 90 Panduri Str., 050657 Bucharest, Romania

d Medical-Military Institute, Bucharest, Romania

Abstract

We present the case of a patient in his seventies, suffering of an Organic Affective Disorder and multiple comorbidities post ischemic burden strokes, with long term treatment of two antidepressants and one neuroprotector medication and cognitive stimulation. Diagnostic: heart failure type III NYHA, hypertension type III with medication; Multiple ischemic strokes in antecedent; Insulin-dependent diabetes mellitus; Diabetic neuropathy; Organic affective disorder; Multiple-medicines addiction. Methods: complex medical investigations, including MRI with contrast substance over two years, regular psychiatric evaluation, psychological stimulation focusing the superior cognitive function, as well as affectivity and personality. Cognitive stimulation was performed using psychological tests challenging the analyzing, sequencing, planning, predicting, control and operational functions. Results: The patient's condition has growingly depreciated beginning with a several acute myocardial infarction at a very young age, in 1974; the following have added up in time: diabetes type II, three by-passes, ischemic stroke with left hemi-paresis, and one month recovery; ischemic stroke with partial motor aphasia, several months recovery. Almost inevitably, the patient developed an Organic Affective Disorder with a depressive episode in 2015. At present, he achieved euthymia and a positive reaction to a combination of two antidepressant, one tymostabilizer (targeting the diabetic neuropathy) and one neurotropic. Since January 2015 the patient has periodically presented confusion states with brut amnesia lasting up to several hours, with a potential trigger his nocturnal abuse of benzodiazepine. His blood glucose levels oscillate between 150-160 ml/dl, with potential transitory ischemic strokes. In respect of the neuro-cognitive and dispositional state, the combination of antidepressant and neuro-protector has induced a state of Euthymia, without mnezico-prosexic or superior function of thought disorder, maintaining extensive digressive speech. Conclusion: the combination of antidepressant and neuro-protector, along with psychological stimulation using cognitive tests, diminish the cognitive deficits and induce euthymia, also diminishing gliosis of brain areas by neuroplasticity.

Keywords: organic affective disorder; multiple medication addiction; cognitive stimulation; antidepressant-neuroprotector combination.

1. Introduction

Lately, due to the evolution of technology and emergence of new technologies, there have been several discussions on whether schools should integrate technology as teaching aids and what the role of technology in education is. Technology has always been used in education, starting from carving figures on rock walls to technological devices, such as laptops, mobile phones, electronic blackboards, e-books and many others. The importance of technology in education has remained constant in spite of the changes of the materials and the evolution of technology. The emergence of new technologies has helped shape the new ways in which people are communicating, and forming social constructs and according to recent research that these technologies are shaping the way we think, work and learn, especially for the youngest generations (Green & Hannon, 2007). This "transformation" has had various implications on

* Corresponding author. Tel.: +4-0731.581.100; fax: +4-031-105.5890
E-mail address: simonatrifu@yahoo.com

education. ICT is starting to be very dominant in schools, and children and new generations of students are increasingly growing up with ICT and using technology in their daily lives, still teachers' use of ICT for teaching and learning continue to be a concern for educators, according to the study of Polly et al (2010). Their article uses the framework of technological pedagogical content knowledge (TPACK; Mishra & Koehler, 2006) to analyze findings across projects from the U.S. Department of Education's Preparing Tomorrow's Teachers to Use Technology (PT3) initiative. Approaches such as mentoring methods course faculty, teachers, and creating technology-rich instructional materials were associated with increases in preservice teachers' technological knowledge and their frequency of technology-rich instruction during field experiences. Lastly, the authors provide implications and directions for future analyses of technology integration efforts.

All teaching aids have the purpose to make lessons easier to learn, more interesting. They are usually chosen by the teacher, in terms of being useful to the context of the lesson. The teaching aids also have as objectives to enhance teacher's ability to make the process of teaching-learning more effective, to develop easy and understandable material, to create interest in the taught subject, to increase the attention of students and to communicate better. The focus of this paper will be on e-books and their role in education as teaching aids, also in the form of e-manuals or digital manuals for students. According to Cucos (2014), introducing digital textbooks in teaching raises some concerns, beyond the economic, sociological or educational policy. A change in learning media required an evaluation from the perspective of psychology of learning. Switching from the classic manual to the digital one is part of the broader trend of cultural digitization and virtualization, which I will further extend upon in the discussion and results section.

According to Cayley Reid (2017), the new literacies theory implies that teachers implement technology into their classrooms so that students can navigate through the 21st century. Researchers also believe that e-paper is potentially equal to printed paper in terms of optics, due to the customizable nature of the platform, meaning that for young students it would be a benefit to use e-books. The e-books impact on literacy will be analyzed according to the specialized literature. As the literature shows, eBooks are not only becoming widely accepted, but also embedded in students' expectations of core provision (SCONUL 2013). EBooks can be embedded in online programs or made available through virtual learning environments, however, the main beneficiaries of this change would be the visually impaired and print disabled students due to the text-to speech option available for all digital materials. EBooks are digital files, so they are inherently accessible with text-to-speech, but due to author and publisher concerns over copyright infringement, some eBooks are protected with Digital Rights Management (DRM), which can prevent text-to-speech software from accessing eBook content. Text-to-speech (TTS) is available on most computers, mobile phones, e-readers, tablets and it uses computer-generated synthetic speech to read out text, also if they are not built-in, third party applications are available for many systems.

2. Study Objectives

The medication as a treatment choice is imposed by the condition of organic depreciation of Mr. J's central nervous system, as presented by the medical exams and presented herein above. The prescribed antidepressants and neuro-protector have been chosen based on the following criteria: the lack of adverse effects in cardiac and metabolic endocrine areas (many AD are prohibited for aggressive patients); the need to find an AD with emotion inducer and support of sleep, allowing decrease of addiction to BZD; the need of an AD to fade high level impulses, part of the suicidal risk model based on acting out (dampened emotions); AD with neurotropic action with effect on cognition, working memory and cognitive processing for the development of alternative cognitive circuits (long term follow-up shows, brain gaps decreasing and areas of the cerebral gliosis developing); potent AD for noradrenergic symptoms (apathy, an ergic acting deficit, difficult mobilization).

Cognitive stimulation is added to the treatment as a support of the patient's cognitive functions, and brain training, trying to use the high functionality on the rationale and logic sides of this patient's psychological pattern (as a professional he is a logician). Using the aid of the medication for the biological deficit of the patient's central nervous system, the cognitive stimulation would recover abilities left aside by lack of practice, and use such to improve general functionality and therefrom self esteem, which is well known that leads to a higher quality of life.

2.1. Data analysis. Psychological exams (pre- and posttreatment)

Appearance: Patient with neat clothes, hypomimic facies and sad gaze expressing need of help, emphatic attitude hiding the subjective pain produced by depression and inability to cope; time/space orientation: the patient is psychologically oriented, including his personal life history. Speech focuses on the past with recall of life situations where he himself has been in the spotlight.

Perceptions: Statements in the register of depressive psychosis ("rotting flesh on me") Cotard outline. Feeling subjective stillness concerning the passage of time in their lives. Irritability, Dupre cenestobody pathology, concern for the functioning, muscle pain type symptoms of the masked depression area. Defense mechanisms from the stoic register and no complain.

Attention: Difficulty in the area of the focus, stability and selectivity of attention, spontaneous and voluntary. Insufficient functioning of the attention filter, which gives speech a digressive nature, difficult to follow. Attention is significantly improved by a vesper quality according to a depressive model, and given the revival of major depression after reducing the effects of BZD that had an addictive effect on the patient.

Memory: Fixed Hypomnesia due to working memory deficits, with selective hypermesia of certain data, facts and events personality-integrated around ideas of subjective personal value and power over the world. Capacity to evoke multiple events of this type with mood improvement and effects of "serotonin spike". In this context, memory confabulation appears, with the unconscious purpose to present himself in a favorable light, which aims to reduce its sad mood (infantile mechanism of deception, widening the boundaries of reality). Pseudo reminiscence phenomena (tells stories of the past with marked impact on affect, behavior and personality, which is brought into the near past, as if it happened a few days ago).

Thinking: Slow rhythm and verbal-idea flow, fading feeling at the level of thought, digressive speech, which in the past had conscious purposes (a mechanism to manipulate others), and it is now pathologically augmented after losing its adaptive role, and makes the patient lose his thread of ideas. Thoughts of hopelessness, incurability, devaluation, depreciation, up to the level of relational sensitivity. Critical thinking remains logic, as well as capacity of making inferences, deductions, drawing conclusions (he is a logician by his academic training). General ability to extract the important parts from the discourse or, conversely, to customize. Capacity to associate, to make correlations, to raise the thinking to the symbolic and metaphorical level, using proverbs and parables to support his opinions. The presence of frontal lobe pathology (post frontal Roland AVC) is expressed through the many attempts at introducing jokes or sayings that are distant from the subject of the conversation, and give the conversation a more tangential character making the dissociation visible (Rusu, 2015)

Emotionality: Depressed mood of severe intensity and inappropriate excessive guilt associated predominantly to the mother. Feelings of helplessness, devaluation, default, destructure. Loss of pleasure in almost all activities previously considered interesting, sad and pessimistic vision of the future, reducing self-esteem and self-confidence. Preponderant type of depression present in this patient is the noradrenergic depression, where the predominant factor is the decrease of the energy level, increased fatigue and reduced activity, recurring concerns for a burial ritual Arietta, a "funeral as a large public gathering that is presided by the deceased".

Activity: Limited to minimal self-care. Existential loneliness on a taciturn structure. He reads, navigates the internet, reviews the press, has limited communication in an elite group. During therapy he resumes writing (handwritten, initially with difficulty and with dysgraphia, after a year and a half he can write about four pages a day), he publishes, and appears on a few TV shows, where he is able to keep to the topic of the discussion (in a free interview). He plays games he learned in his youth, for which he has previously built abilities at a high level, and which therapy is helping him to bring into the working memory buffer and use them.

Interpersonal: Under treatment, relational sensitivity is significantly reduced (the belief that doctors no longer give him the attention he deserves because he has other political views or because he cannot provide anymore to others the support he previously provided, convinced that he is part of an experiment and he a subject in certain studies, conviction that produces in him an immense ambivalence).

Instinctual life: decreased appetite (controlled through his own will and diet). Hyperbulia, both passive and active. Frequent erections under medication (he considers this an adverse reaction). Suicidal recurring impulses. Presents a defense mechanism similar to existential serenity culturally enhanced by the environment of origin (the belief that elders must go away from the community and die worthily), frequent stories disapproving of personalities who died lamenting, cultivating the stoic model, but from a perspective that emphasizes his personality type. Drug impulses (sedative hypnotics and tranquilizers addiction, most BZD type medications). History (about 23 years ago, prior to the bypass surgery, increased consumption of alcohol with the use of defense mechanisms like hanging to reality, unable to lose control of situations, relating to the painful regret that he could never leave himself to the will of fate).

Nycthemeral rate: drug-induced sleep, with a high dose, which is typical for addiction. He gets asleep at around 3.00 a.m., with difficulty of waking up, and confusion in the morning, that lasts until the afternoon. A clinical depression may have been in place for many years and this nycthemeral behavior could be a defense mechanism to cancel the contact with reality during the mornings when the depressed mood is generally very high.

Personality: rigid strong structure, using suppression and repression as major coping mechanisms. When they are not sufficient to ensure his separation from trauma, denial arises into his thinking, along with splitting emotions and tangential thinking. Feeling intense emotions of stillness. Hysterical-paranoia type elements, that, in the major depressive episode, turned into sensitivity, fear of rejection and fear of abandonment (the latter sufficiently disguised, though).

Heritability: On the paternal side, he inherited a tough structure, rigid, concerned with fairness, justice, duty, critical sense and civic sense, labor, effort, endeavor, to get far. On the maternal side, killing instinct from his grandfather (boosted by jealousy), then addictive behavior alcoholic (he committed suicide by hanging in a demonstrative paranoiac manner, on a bet, in the public square, inducing all those present a feeling of consternation and shock – however, no one does anything to stop him). The mother, after giving birth to five children, presents, for about five years, symptoms of paralysis of the lower limbs, reports suggesting hysterical conversion ("They brought a doctor from abroad" "Nobody knew what she had, she was very sad, we do not have to make her angry, no one knew what to say", "I, as a child, was in charge of the whole house, so she wouldn't have to do nothing and she would get better"). Subsequently, after 40 years, the mother recreates the leap from somatic and psychic and experiences, for many years, a major chronic depression of high intensity, everyone remembers her crying all the time and nothing making her happy. The patient says that sadness and weeping mother had aroused sadistic and aggressive feelings in him, in the way he was interacting with her. At the present moment his depression is dominated by feelings of guilt towards the mother and because of his own attitude towards her as a young man, without any regret concerning other significant facts of his life (in relation with other key people in his life) towards whom he had the same type of behavior.

2.2. Cognitive stimulation

Cognitive stimulation was realized using regular psychological tests, without a focus on any particular type, that exercise the cognitive functions of analyzing, sequencing, planning, predicting, controlling, as well as operational. The patient participation in the testing, besides the assessment valence, had the objective of recovering his high rationale abilities. As a result, after one and a half year of such treatment, the patient is capable to recover and use long forgotten abilities he skillfully used in his youth, with a notable improvement of working memory functions, and participating in TV shows where he is capable to hold on to the topics of the conversation.

3. Results

Areas that reacted to treatment:

Perceptual area: Decreased irritability, growth of sensorial thresholds, blurring Dupre cenesthopathy, cancellation of the patient's interpretativity and the screening of somatic concerns. Decrease of neuromuscular pain, including neuropathic type sensations.

Attention, Memory, Cognition: Speech adequacy, after decrease of digressive and circumstantial aspects. Improvement of working memory, with increased concentration, superior filter operation for attention, capacity of using analogies, proverbs, metaphors and symbolism. Increasing capacities of anticipation, planning, sequencing and action control.

Mood and emotions: Induction of Euthymic state. The first symptoms which were acted on by the treatment were those concerning sensitivity and the experience of rejection. Modulation of emotions, decreasing subjective sensation of stillness in time, up to and flattening them. Modulation of concerns for abandonment and the lifeless sphere. Using the hysterical aspects of the patient's personality for reinsertion into society.

Impulse sphere: soothe raw emotions, toughness and intransigence, relative reporting to others. Diminishing addictive impulses. Decreased suicide risk by modulating aggressive vein and the nurturing of warm emotions and their expression.

Motivation: future plans, concerns with social life, concerns for writing, meetings and conversations for areas previously enjoyable.

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Loss of identity in disorganised schizophrenia

Simona Trifu^{a*}, Andreea Marina Mihalache^b, Mihaela Stefanoiu^b, Daniela Andronache^c, Antonia Ioana Trifu^d

^aUMF "Carol Davila", 37 Dionisie Lupu Str., Bucharest, Romania

^bFPSE, University of Bucharest, 90 Panduri Str, Bucharest Romania

^cTitu Maiorescu University, 187 Calea Vacaresti, Bucharest, Romania

^dMedical-Military Institute, Bucharest, Romania

Abstract

General description: A typical case for a disorganized schizophrenia with a clinically complicated evolution. Assessment based on life history, detailed psychiatric examination, investigating cognitive, affective and personality functions.

Objectives: The work aims at assessing the current profile of a disorganized schizophrenia, in a woman aged 30, whose mother presented a similar psychiatric pathology. The patient is a social case, having neither income, nor house. One should highlight the need of institutionalization of such a person lacking a tutor, affected by identity disintegration, lack of discernment, in public social centers, with publicly supported assistance.

Hypothesis: Non-differentiated schizophrenia is a complex disorder having consequences in personal and social functioning, disabling the patient, altering identity, psychic capacity and memory. Hallucinations also appear together with the drop of sensorial thresholds.

Material and methods: Analysis of psychiatric history, social investigation, psychological examination upon hospital admission, monitoring under psychotropic treatment, supervised long-term hospitalization, repeated psychological assessments.

Results: Loss of reality testing, disinvestment until perceiving herself as an object. She soliloquizes continuously throughout the assessment, willing to stop imperatively negative hallucinations she hears.

Conclusions: Lack of social and professional abilities, insufficient contact with reality, absence of critical judgment, emotional self-disinvestment, thought disorganization and Ego duality, combined with lack of family or other social support qualifies the patient as a clear beneficiary of permanent assistance public system.

Keywords: Disorganised schizophrenia; hallucinations; split; disinvestment; affective flattening; Ego duality; disorganisation; non-differentiation; permanent social assistance.

1. Introduction

The patient herein presented is a person, unfortunately, like many others, who needs permanent public assistance, due to lack of family or other social support. The high degree of her dysfunctions makes her incapable to ensure her own survival means, therefor, around clock assistance is one important aspect to be considered, when treated in and released from specialized psychiatric facilities. We hereby make this example in order to enhance the need of developing and implementing specific public policies and strategies for the assistance of such demanding affected persons. One very big problem we encounter when releasing such mentally afflicted persons from psychiatric facilities, is their destination. Where do we send such persons, once their staying in a hospital comes to an end?

R., 31 yeas old, was brought to the hospital by the ambulance. Her speech at admission goes like: "The Ambulance service came and brought me to hospital"; „I was lying quietly in bed, I was cleaning, I went, I walked, I went to the Police station to ask of my mother and I think she called for Ambulance service, because she doesn't bear with me". In reality some neighbor called for the ambulance, at that

* * Corresponding author. Tel.: +4-0731.581.100; fax: +4-031-105.5890,
E-mail address: simonatrifu@yahoo.com

moment the patient presenting imperative auditory hallucinations and expressing strange behaviors. She lives in an abandoned house, and neighbors noted and were disturbed by her strange manifestations.

Psychiatric disturbance at admission: paranoid schizophrenia. Acute psychotic episode, prevailing thinking disorganization (Predescu, 1976).

Hereditary collateral antecedents: Mother diagnosed with paranoid schizophrenia, hospitalized in 2012. The patient is aware that mother is psychically ill: "Mother fell ill when she gave birth, she needs loneliness"; "She beats me, she is a tough and sour woman"; "She has a paranoid schizophrenia more serious than mine".

Mental disturbance history: Onset in 2004, at the age of 18, with changes on the productive dimension of thinking, imperative hallucinations, the voices telling her to do various negative things. First admission in a psychiatry hospital in 2006. At present, the disorganisation dimension is much more accentuated than the productive one: "I was hospitalized all over, in health centres about six times".

Personal history: Disorganised family, with four children: R. and three brothers. Her discourse about her brothers goes: "Yes, I have two brothers, both are the same"; "I have a sister who is like three sisters". Following the divorce of the parents, the boys were entrusted to the father who is, ironically, an ambulance driver. ("I resemble my father"). The patient has practically no relationship with her father, although she says the contrary: "I sometimes talk to him; I get along better with my father, because mother is ill". The father has remarried: "My father is with a Romanized gipsy and he does not love my mother"; "He has beaten my mother, but he loves the gipsy woman"; "He is a bad man".

R. used to live in a rented house, with her parents, but their lease was cancelled due to non-payment: "I don't have where to live, I have paid the rent and I haven't paid and they are throwing me out". One of her brothers took care of R., until one year ago, when her health condition aggravated and she left home. Her brother has his own children and considers patient's presence as a danger to his family: "Everybody shouts at me that I harm them. I am just looking for a place where to live". She lived for two months in an abandoned house, with no doors or windows, no heating, helped only by neighbors: "I live alone in a studio apartment and in a small bed and I am cold". R. is single, has no children.

Patient's assertions: "Police came because I didn't obey mother at Christmas"; "There are evil people, who wish me bad and didn't give me any small room to live"; "My father's wife is a gipsy, she is transforming herself. She has diabetes; I also have diabetes"; "I have low education, ten years of study, I did bad things in school, Mrs. teacher beat me, I was not obedient"; "I went for a second exam in History"; "I am ill, but I do not do anything bad, I cannot stand onion"; "I have eyes problems, but also nose problems, I had nosebleed"; "I have dysentery like your mother"; "An aunt told me she has no time for you, only for my little dress"; "I am egoist and thick-skinned, so told me a little child"; "Mother told me I am a glue sniffer, but she didn't bring me anything good, she brought me only alcohol"; "My sister will be ok if she is obedient, we are evil with her because she is ok."

2. Psychiatric examination

Appearance: Precarious hygiene, staring gaze, sad mimics, incoherent speech. Holds same body posture throughout interview. Hospital clothing (pyjama), no bizarre elements. Looks lost, sad, indicating persecution, culpability, also verbally expressed: "Father has beaten me, so that I do not tell the truth to everybody, that I don't know to cook". Continuous mimic psittacism (proof of intra-psychical dissociation). Time-space orientation: auto-oriented, yet allopsychic deficit: "I was admitted to hospital 5-6 days ago, I was all over" (in fact, a few weeks before).

Perception: Quantitatively, hypoesthesia – global diminishment of sensations and perceptions. Qualitatively, auditory illusions: "I hear voices, but I am deaf and I say that I am my mother's enemy, I am the bad boy, that's how I am, that's how I was born." Imperative hallucinations telling her to do various negative things: "The voices tell me to do bad things and now they tell me I am ok".

Attention: Concentration difficulties, misdirection, tangential answers: “Are your thoughts very disorganised? / That’s why I cut my hair” (she has two little tails like horns, by which she is in contact with aliens; cutting her hair would interrupt this communication). When asked “Why have the Policemen beaten you?”, she answers tangentially: “I haven’t found my mother home, I couldn’t find her”.

Memory: Temporal and spatial disorientation and short-term memory deficit: “I cannot keep things in mind”. Qualitative dysmnnesia (paramnesias): distorted memories, in disagreement with reality, either chronologically or lacking contact with reality: “My sister (undocumented sister existence) has problems with her head, I don’t like coke”, “I have two brothers, but Danut did not come at home because he is ill, his dog has died”.

Thinking: disorganized, speaks a lot, but does not understand what she says. Illogical contiguous associations: “She is a fortune teller and she treads on my feet because she has no value”; “Mild, light, feeble”; “Beautiful, fearful”. Idea-verbal incoherence, poor language, formal content distortion, regionalisms: “Do you communicate with aliens?/I need to shut up. Each human being has a problem, I don’t know how to cook.” Her words are an encoded system of oral signs, openly representing the mental process of thinking operation. Paralogisms (argumentation without logic): “This is prettiest, that we don’t lose our sympathy”; “I feel a little without power when I have an arthritis, when the breast colour changes”. Schizophasia, word salads. I haven’t obeyed my mother, I have no money, I have a studio apartment of my own, I have a fear, I went to the fortune teller”.

Affectivity: Emotionally flattened. Asked “Are you happy?” she answers “I am sometimes, too, but not like you”. Affectively disinvested, she experiences no feelings: “I am cast out, if you also leave me to sleep, do spend my holidays in hospital, it is ok, if not, not.”

3. Psychiatric diagnosis:

Axis I: Paranoid schizophrenia. Acute psychotic episode. Axis II: Without information on premorbid personality, at present, Psychotically disorganised personality. Axis III: Nothing clinically significant. Axis IV: The patient has never worked and she comes from a disorganised family. She has a high degree disability certificate that she has not renewed since 2011. Axis V: GAFS – 35. The patient has reality testing, communication, autonomy difficulties, hallucinations and formal content thinking disturbances. The DSM IV diagnosis criteria for Paranoid schizophrenia met by this patient are: preoccupation for one or more delusional ideas or frequent auditory hallucinations, and none of the following symptoms is predominant: disorganised language, disorganised or catatonic behaviour, flat or inadequate emotions. (American Psychiatric Association, 2013) This patient’s schizophrenia dimensions: Productive - hallucinations, delusional ideas; Negative - precarious hygiene; Disorganisation – at the thinking or behaviour level.

Differential diagnoses: Delusional disorder, according to DSM IV, is based on the non-bizarre nature of delusional ideas and absence of other characteristic schizophrenia symptoms (hallucinations, disorganised language or behaviour or notable negative symptoms). The delusional disorder subtype does not include marked disorganised language, disorganised behaviour or flat or inadequate emotion and it is often associated to a lower functioning decline. Affective disorder with psychotic elements and Schizo-affective disorder: according to DSM IV, affective disturbance is frequent in prodromal, active and residual phases of schizophrenia. If psychotic symptoms occur exclusively during periods of affective perturbation, diagnosis will be Affective disorder with psychotic elements. In Schizoaffective disorder, there is an affective episode concomitant with symptoms of active phase, affective symptoms are pre-existent, and delusional ideas or hallucinations are present for at least two weeks, in absence of prominent affective symptoms. On the contrary, affective symptoms of schizophrenia have a short duration, occur only in the prodromal or residual phases or don’t meet at all the criteria for a depressive episode. Affective symptoms fully meeting the criteria for an affective episode combined with schizophrenia with

peculiar clinical significance, can diagnose Depressive disorder without other specification or Bipolar disorder without other specification. Catatonic schizophrenia can be difficultly distinguished from Affective disorder with catatonic elements.

4. Case particularization

Strongly disinvested affectively, the patient perceives herself as an object: "Mother did not give birth to me, she gave birth to a kitten"; "Kitten and puppy"; "Mother brought me into the world as kitten"; "Are you staying in a centre? / Yes, I stay, because I am pig, like the piglet". She is split, disorganized in thinking yet on a structured personality. She does not present suicidal ideation and she is not aggressive. Discrepancy between the idea of being cast out and having no place to live and affective flattening is prominent (Gabbard, 2007). Patient does not experience at all sadness.

Conspicuous soliloquy, R. lives between two worlds: concrete reality and the quasi-permanent imperative hallucinations. The identity dimension is lost, and yet she answers: "Are you a girl or a boy?/I am a woman". Non-differentiation is relevant, she functions in a logic specific to the unconscious modalities, where she is at the same time a boy and a girl, and her brothers are one and the same. One defense she uses is projection. Emotionally, the only feeling that still exists is rejection, not being wanted, being chased away. High degree of suggestibility, Ego duality, when R. does not perceive herself as a person and identifies herself with a sister who does not exist: "My sister is ugly, I hate her"; "We are two brothers, because the little sister is ill". Non-belonging to Ego leads to impersonal speech. Another manifest defense mechanism is regression (or otherwise lack of progression), the patient saying she is a little girl: "What's the name of the boy with whom you were? / I don't know, because I am a little girl."

The hereditary collateral antecedents and genetic background explain biological vulnerability, while family climate - child neglecting, isolation, financial difficulties - gets the patient stuck within her early childhood traumas. She projects upon her undocumented sister the anxious self-image, thinking disorganisation, inner chaos. R.'s primitive unconscious defenses raise to diminish the terror generated by inner conflicts and instinctual requirements: social isolation, devaluation, disinvestment, negation, projection, splitting. Stressing childhood events led to ego vulnerability and incapacity of developing mature defences. Lack of information and the present dimension of pathology leads to the hypothesis that her real childhood traumas could eventually be found in her tangential messages.

Vulnerability construction: Child neglecting, absent father, hospitalized mother: "I am oppressed, I have remained without parents." Abuse, reaction to her fragility; possible sexual physical abuse: "The art of beauty to love to make mistakes, I do not interfere, because I am wrong, but it is the prettiest, I have committed sins".

Elements supporting the case gravity: This case highlights the heavy need of involvement of competent public agents to assist persons with psychiatric diagnosis without next of kin or tutors, who need social assistance centres, more social assistants and healthcare professionals, for medication and hygiene management.

Treatment results: Medication functions well resulting in the diminishment of hallucinations, but it has no great effect on thinking disorganisation. R. has an increased resistance to psychotherapy (speaks without understanding).

5. Prognosis factors and conclusions

The case of R. is interesting both from a psychiatric perspective and a social assistance one. It highlights the need of involvement of competent public agents to assist persons with such severe psychiatric and lacking next of kin or tutors, who need permanent medication and hygiene management.

The prognosis is reserved since the pathology was very early triggered, (at the age of 18) and the patient has an important number of psychiatry hospital admissions, she has a severe genetic load and is completely isolated socially and professionally.

However, we hypothesize that assuring her with a place to live, eventually within a group of assisted persons with similar degrees of functionality, might lead to some improvements of self-image and therefrom, psychological supportive interventions might have better results. At the moment, the whole 'no place to live' discourse engages all the limited psychological resources of the patient, leaving her with no reserve to coagulate and hopefully build her self-identity. A person with her structure usually strongly attaches to places and objects, the stability of which could bring some stability in the internal world as well, and calm down to a sustainable level the extreme anguishes tormenting her chaotic internal structure; however, at the moment, in this patient's case, such external anchors are completely absent.

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POSTER

Applied math course for children aged between 9-12

Silvia Timișescu^{a*}

^aLogos Academy, 43A Panait Istrati Street, Bucharest 011545, Romania

1. Introduction

The Applied Math Course was developed for children aged between 9 and 12 years old. They were divided into two study groups: one for age 9-10, age range which overlaps with the last 2 year of the primary school and one for age 11-12, involving children in the first two years of the gymnasium school.

The main goal of the course is to improve and strengthen the learning of math concepts studied by kids in school but also to explain them in a more intuitive and fun manner. In addition to the main goal, the course aims to achieve objectives like: developing a mathematical intuition, improving imagination and creativity, encouraging teamwork and inspiring a voluntary and self-motivated pursuit of knowledge. Nevertheless, the course also wants to prove to children that math can be very useful when it comes to understanding the world around us and the society we live in. The entire course is 14 weeks long and is structured into two modules: Module I – Science & Experiments and Module II – Financial Education & Entrepreneurship.

2. Materials and Methods

Every module is designed such as the lessons start from a practical or a logical problem which has the role of capturing the attention and make the children ask themselves questions and wonder on a given subject. The next part of the lesson consists of a brief theory combined with debate on the subject to assure that the more abstract concepts are understood and assimilated. In other words, we start the lesson from a practical regard and develop it to a theoretical one. Afterwards, we strengthen the learning process by resolving applications that involve previous discussed matters. Throughout the lesson, children take part in practical activities to test out what they have learned. They are strongly encouraged to use as often as possible the question “why?” in order to experience a deeper understanding and a better correlation between studied notions.

The first module focuses on approaching and understanding natural phenomena while the second module is dedicated to financial education and basic economic concepts.

The materials used differ from lesson to lesson depending on what facts of the current module they're based on. In no particular order, here are some examples: lego classic, tangram, xcolony, kinetic sand, remote control car, monopoly, matches and pasta sticks, plasticine, geomag etc.

3. Results & Conclusions

So far, children enrolled in the Applied Math Course have shown increased commitment, self-motivation, and a high interest in discovering new scientific facts. They are more eager to use and strengthen math notions that are applicable in other domains, such as science, biology, finance, because those abstract notions suddenly become a little more “natural” and start to have a practical use.

In the first module, notions such as fractions, ratios, proportions or percent are explained using physics contexts: motion and rest, mass and density or basic

* Corresponding author. Tel.: + 040724740279
E-mail address: silvia@logosacademy.ro

electricity concepts, geography contexts: the growth and drop of a population or ancient civilizations.

Besides algebra notions, kids also learned about basic geometry. In the first study group - kids aged between 9-10 - we used tangram pieces to learn about triangles and quadrilaterals and children had to make animal shaped figures from the tangram puzzle hence a biology context was used. They also made 3D solids using matches, pasta sticks and plasticine or cutting out the net of a cube and a cuboid.

In the other study group, kids were introduced to the notion of polygons: definition, classification and examples. Although children already knew about the triangle because they learned it at school, they were not aware that the triangle is a polygon; they lacked an overall view about what are they really learning about. Tangram pieces were used to form different polygons: triangles, squares, rectangles, pentagons and hexagons but also to give a better and intuitive understanding of the concept of area. The course also introduced them to polyhedrons and in particular to the five Plato solids. This approach towards geometry has the role of offering children “the big picture” and the awareness that the things that they learn in school are not arbitrary and that they are applicable in real life.

Regarding the second module, which will begin in May, notions such as profit, taxes, interest rate will be explained in a simplified manner so that children develop a proper vocabulary and get a glance on how the economic aspect of a society is built.

In the near future, the Applied Math Course will be extended throughout the entire school year and enriched with more modules like chemistry and history. It will also be developed to include children aged between 8-14.

In addition to the main goal, the course will seek to be an example of integrated teaching and to figure which domains/modules are better suited for each age, for a real understanding of the basic theoretical notions but also of the everyday life.