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WHAT FACTORS INFLUENCE THE DEVELOPMENT OF READING FLUENCY OF ROMA CHILDREN? THE EFFECTS OF WHOLE-CLASS REPEATED READINGS AND SCHOOL ABSENTEEISM

DACIAN DORIN DOLEAN[1]*, IOANA TINCAS[2] & CRINA DAMSA[3]

ABSTRACT. Research literature shows that Roma children's literacy skills are less developed compared with their non-Roma peers. This situation represents a major deterrent in integration of Roma within the majority of countries of European Union. In this study we measured the effects of an intervention program aimed to diminish the gap in reading fluency skills between Roma and non-Roma 2nd grade children. The results indicated that a) Roma children's performance was significantly lower than their non-Roma peers before and after the intervention, b) there was no difference in the reading fluency growth rate of Roma and non-Roma children and c) poor school attendance of Roma children moderated the effect of Roma ethnicity. The findings suggest that poor school attendance has a particularly significant negative effect on the development of reading fluency of children of Roma ethnicity.

Keywords: *Roma; reading fluency; school attendance.*

Zusammenfasung. Die Forschungsliteratur zeigt, dass bei Roma-Kinder die Lese- und Schreibfähigkeiten weniger entwickelt sind im Vergleich zu ihren Nicht-Roma-Peers. Diese Situation stellt eine große abschreckende Wirkung auf die Integration der Roma in den meisten Ländern der Europäischen Union. In dieser Studie haben wir die Auswirkungen eines Interventionsprogramms gemessen, das darauf abzielt, die Lücke zwischen den Roma und Nicht-Roma-Kindern der 2. Klasse zu verringern. Die Ergebnisse zeigten dass, a) die Leistung den Roma-Kindern war signifikant niedriger als ihre Nicht-Roma-Kollegen vor und nach der Intervention, b) es gab keinen Unterschied in der Lesefluenz-Wachstumsrate von Roma und Nicht-Roma Kindern und c) schlechte Schulbesuch

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von Roma-Kindern moderiert die Wirkung von Roma-Herkunft. Die Ergebnisse deuten darauf hin, dass ein schlechter Schulbesuch einen besonders signifikanten negativen Effekt auf die Entwicklung der Lesefluenz von Kindern der Roma-Ethnizität hat.

Schlüsselwörter: *Roma; Leseflüssigkeit; Anwesenheit.*

The Roma people is one of the largest ethnic minority groups in Europe. Despite considerable efforts made by local, national and European institutions aimed towards supporting the Roma group's economic and social development, their level of education is still shown to be lower than the average in general population (e.g. Decade of Roma Inclusion; O'Nions, 2010; Rat, 2005). Official data from European Union (Council of Europe, 2006; Fundamental Rights Agency, 2014) provide an insight into a dramatic situation when it comes to school attendance, achievement and completion: less than half of 4-year-olds Roma attend kindergarten compared with their non-Roma peers; as many as 50% of Roma children are indicated to fail to complete primary education; in some Central and Eastern European countries between 50% to 80% of Roma children are enrolled systematically in special schools established for children with learning disabilities, and 89% of Roma individuals have not completed secondary education. Empirical research shows that one of the main reasons why Roma children struggle in school and have a drop-out rate higher than their non-Roma peers is their poor literacy skills (Baucal, 2006; Kiprianos, Daskalaki & Stamelos, 2012). It is, therefore, striking that while there is a clear interest at the European level for increasing the level of literacy of the Roma population, the scientific research studies that investigate the development of reading skills of Roma children are scarce. There is little evidence-based knowledge on the extent to which ethnicity can predict the development of reading skills of Roma children, and what school generally can do to help Roma children improve their literacy skills.

Literacy is generally seen as the ability to read and to write. Learning how to read is one of the basic skills learned in school, and which predicts significantly the school performance of children in upper grades (Herbers, et. al., 2012). While the ultimate goal of learning to read is to comprehend the written message, one of the early stages in the development of such skill is learning to read fluently, i.e. identifying automatically the connection between graphemes and their corresponding phonemes. Reading fluently, which is measured by the extent to which children can decode written words quickly, accurately and with the appropriate use of prosody (Kuhn, & Stahl, 2003), was found to be a major predictor of reading comprehension on medium- and long-term (De Jong and

Van der Leij, 2002; Landerl & Wimmer, 2008). Moreover, reading fluency was identified as one of the major variables responsible for achieving reading proficiency (National Reading Panel, 2000) that has the potential to significantly predict the overall academic performance in the upper grades (Rasinski & Hoffman, 2003). Given the importance of reading skills for children's general development and school performance, and the indicated issues regarding the low literacy levels in the Roma population, gaining more insight into how reading fluency is developed among Roma children is paramount.

The development of reading skills in general, and of reading fluency in particular, is predicted by several factors, and one of them is particularly important in the context of Roma children, i.e. school absenteeism. Several empirical studies have shown that school absenteeism can significantly predict poor reading development (Gottfried, 2010; Steward, Steward, Blair, Jo & Hill, 2008), and this variable apparently has a more powerful impact on children at-risk (Morrisey, Hutchinson & Winsler, 2014; Ready, 2010). Just like any other disadvantaged groups, many Roma children do not attend school systematically (Brüggemann, 2012; Kiprianos, Daskalaki & Stamelos, 2012; Kosko, 2012). In this context, examining the extent to which school absenteeism plays a role in the development of reading fluency of Roma children can generate knowledge that has both conceptual and practical application, and will be focus of this study.

Finally, a question arises with regard to how can school contribute to the improvement of the reading fluency skills in a disadvantaged group such as the Roma children. Empirical evidence shows that repeated reading is one of the most effective strategies to improve fluency (Meyer & Felton, 1999; Therrien, 2004; Therrien & Kubina, 2006). Whole-class repeated reading strategy is reported to work for the majority of children, and to have a particular positive effect for struggling readers since it helps overcome possible reading-aloud anxieties and provides them group support from their peers (e.g. Heilman, Blair & Rupley, 2002). Such strategy emerges as suitable for providing the Roma children with support when learning to read, since it can be applied without singling out these children, who may have obvious gaps in comparison to the average class level. Furthermore, it offers clear opportunity to include these children in class-level reading activities. In this vein, this study mainly aims to examine the extent to which a whole-class repeated reading intervention improves the fluency of potential struggling early readers of Roma ethnicity.

Three research questions were formulated in order to address this aim, namely:

1. Can the whole-class repeated reading strategy support the Roma children to improve their reading fluency?
2. Does school attendance predict the development of reading fluency?
3. Does school attendance moderate the effect of ethnicity?

Method

Participants

A total number of 241 2nd grade children from Romania aged between 7 and 11 years were initially involved in the study. However, 35 of these children were missing at least one of the variables of interest. Thus, the final sample consisted of 206 children aged between 7 and 11 years (105 boys, *M* age = 101.41 months, *SD* = 6.40 months). Out of these, 47 were Roma children (36 boys; see Table 1 for descriptive statistics), and 159 were Non-Roma (90 boys; see Table 1 for descriptive statistics).

Procedure

A 7-week/35-day intervention program was implemented to measure the development of reading fluency skills of our participants. Children's reading fluency was measured individually before and after the intervention program by a group of assessors within the same school where children attended classes. Three intervention teachers (other than the regular classroom teachers) implemented the program. To control for the teacher effect, the intervention teachers rotated every week. The intervention program was implemented daily during the regular language arts classes and lasted about 20 minutes. Each day, children read a different story. Initially, the intervention teacher informed the children the topic of the story they were about to read. Then, each story was read 3 times. After the story was read, the children in each class engaged in conversations about the story, by answering a set of standardized comprehension questions posed by the teacher.

Measures

Reading fluency was measured by the number of correct words read per minute, and included two tasks: *Words in disconnected text* (read in 40 seconds) and *Words in connected text* (read in 120 seconds). The tasks were built by the research team, similarly with TOWRE-2 (Torgessen, Wagner & Rashotte, 2012). Each task was measured by using two instruments (two words lists, respectively two age appropriate stories). To check the reliability of our measure, we carried out Pearson correlations between the two instruments, as well as between scores at T1 and T2 for the same instrument. All indices were between $r = .74$ and $r = .96$, indicating good reliability.

School attendance was calculated by counting the number of full days the children were not present in school.

Results

As can be seen in Table 1 (means and standard deviations for all relevant study variables), Roma children in our study were significantly older than Non-Roma children, were absent from school more often, and had lower reading fluency scores both at T1 and T2.

As we were interested in the development of reading fluency from T1 to T2, we created a "growth" variable for each reading fluency measure by subtracting children's decoding scores at T1 from their scores at T2. The resulting scores are also included in Table 1. Although Roma and Non-Roma children differed in terms of their starting and end scores (T1 and T2), their growth rates were not significantly different. Additionally, one-sample *t*-tests indicated that growth curves for both *Words in disconnected text*, $t(205) = 13.345$, $p < .001$, and *Words in connected text* were significantly different from zero, $t(205) = 14.864$, $p < .001$.

Table 1. Descriptive statistics (means and standard deviations) for the two ethnic groups, and independent-samples t-test comparisons for all study variables

	Non-Roma	Roma	*t*
N	159	47	
Age (months)	99.92 (4.23)	106.59 (9.37)	-4.69*
Absence	1.22 (1.78)	4.57 (4.08)	-3.35*
T1_Words in disconnected text	27.37 (12.32)	10.51 (7.07)	16.86*
T2_ Words in disconnected text	32.11 (13.11)	14.64 (9.31)	17.47*
Growth words in disconnected text	4.75 (5.13)	4.13 (4.33)	0.62
T1_Words in connected text	86.87 (51.10)	23.43 (24.35)	63.44*
T2_Words in connected text	109.28 (52.58)	40.96 (40.41)	68.32*
Growth words in connected text	22.41 (21.27)	17.53 (17.67)	4.88

*$p < .001$

In order to determine whether individual differences in the growth of reading fluency could be predicted by ethnicity, school attendance and / or their interaction, we conducted a separate moderation analysis for each of the two reading fluency measures. We centered attendance, dummy-coded ethnicity (using the Non-Roma group as a baseline), and then computed the attendance × ethnicity interaction term by multiplying the two variables. We then carried out a hierarchical regression analysis for each of the two reading fluency measures,

with ethnicity (step 1), attendance (step 2) and the interaction term (step 3) as the predictors. For *Words in disconnected text*, results indicated that ethnicity explained only a non-significant 0.3% of the variability in growth, $\Delta R^2 = .003$, $F < 1$, *ns*, $\beta = -.052$. Attendance was also unrelated to reading fluency growth, $\Delta R^2 = 0$, $F < 1$, *ns*, $\beta = -.024$. However, the interaction of ethnicity and attendance significantly predicted growth, $\Delta R^2 = .021$, $F(1, 202)=4.41$, $p<.05$, $\beta = -.295$. This indicates that while attendance does not seem to predict reading fluency growth in the overall sample, for children belonging to the Roma group, the lower the school attendance level, the slower the growth of their reading fluency (which is not the case for Non-Roma children). For the second reading fluency measure – *Words in connected text* – results indicated that ethnicity was not associated with individual differences in growth, $\Delta R^2 = .010$, $F(1, 204) = 2.053$, $p = .153$, $\beta = -.100$. However, a higher number of absences was significantly linked to a lower growth rate over the entire sample, $\Delta R^2 = .061$, $F(1, 203) = 13.392$, $p < .001$, $\beta = -.285$. Finally, there was no significant ethnicity × attendance interaction effect, $\Delta R^2 = .010$, $F(1, 202) = 2.132$, $p = .146$, $\beta = .175$, indicating that the effect of attendance was similar in the two ethnic groups.

Discussion

This study aimed to identify to what extent an intervention program of whole-class repeated reading strategy supports the improvement of the reading fluency of Roma children. Our findings showed that Roma children scored significantly lower than their non-Roma classmates, both before (T1) and after (T2) the 7-week intervention program. This indicates that the gap in literacy skills between Roma and non-Roma children is substantial, and these findings are consistent with previous empirical evidence from other countries (Baucal, 2006; Kiprianos, Daskalaki & Stamelos, 2012). However, the growth rate of the two ethnical groups was not significantly different during our 7-week intervention. This indicates that, once Roma children come to school and are exposed to the same educational opportunities and support as their non-Roma peers, they have similar chances to develop their literacy skills.

Our findings also showed that missing out on a few days of school did not significantly impact the 7-week growth rate of our reading fluency intervention for the children in our sample. However, the significant interaction effect of attendance and ethnicity for words in disconnected text indicates that Roma children are particularly vulnerable when they are not present in class, and that school attendance plays a crucial role for this category of children. Our findings are consistent with other studies in the literature which indicated

that children from disadvantaged families are particularly vulnerable when they miss school (Morrisey, Hutchinson & Winsler, 2014; Ready, 2010). It is interesting to note that the interaction effect between attendance and ethnicity was not significant for the measures of reading words in connected texts. This is explained by the fact that the growth of reading fluency of words in connected text is faster than in disconnected text, since such tasks involve reading comprehension (and relies on oral language skills) that need a longer time to develop (Klauda & Guthrie, 2008; Rumelhart, 1994).

The generalization of the results needs to be treated with caution because the reading growth between the two testing points cannot be fully explained by the intervention program alone (which lasted about 20 minutes daily). Two potential unaccounted confounding variables might partially explain the reading growth: classroom teacher effect and differential instructional content. However, regardless the aforementioned limitations, the conclusions about the interaction effect between school attendance and ethnicity are unaffected, since the data collected for the two variables leaves no room for ambiguity.

The findings of our study indicate that further research is needed to clarify the sources of poor literacy skills of Roma children at an earlier age. The effects of a 7-week intervention program developed in 2nd grade, which had proven to be effective in improving fluency for at-risk students (like whole-class repeated readings) are not strong enough to compensate the development gap between the Roma and non-Roma children. However, our findings showed that if Roma children have similar schooling experiences with their non-Roma peers and attend the school regularly, their literacy skills can develop at similar rates with their peers.

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THE DESIGN AND DEVELOPMENT OF A LAW ENFORCEMENT ENGLISH COURSE: A CASE STUDY

CRISTINA PIELMUŞ[1]

ABSTRACT. The paper aims at highlighting the challenge of a 13-year English language teaching experience in a vocational higher education environment, namely the Romanian Police Academy. More specifically, it offers an insight into an intricate process of designing and implementing an English language course for Romanian law enforcement students. The English for law enforcement course book has been the result of a thorough process, which consisted of several stages such as the identification of the students' learning needs, a subsequent step of assiduous documentation and careful selection of materials, ultimately followed by an elaborate materials development. The course has a practical focus and its goal is primarily to provide students with a wide range of police-related topics depicting authentic job-related situations and secondarily to integrate language learning activities tailored to the students' need to practice all English language skills.

Keywords: *English for law enforcement, course design, learners' needs, task-based learning, productive and receptive skills*

ZUSAMMENFASSUNG. Die Arbeit zielt auf die Hervorhebung der während eines 13 Jahre langen Englischunterrichts gesammelten Erfahrungen im Bereich der Hochschulausbildung, nämlich der rumänischen Polizei-Akademie. Insbesondere bietet die Arbeit einen Einblick in einen komplizierten Prozess der Gestaltung und der Implementierung eines Englischkurses für die rumänischen Studenten der Strafverfolgung-Studienganges. Englisch für das Strafverfolgungskursbuch ist das Ergebnis eines gründlichen Prozesses gewesen, der aus mehreren Stufen bestand: erstens die Ermittlung der Lernbedürfnisse der Studenten, anschließend die eifrige Dokumentation und sorgfältige Auswahl der Materialien, letztlich von einer aufwändigen Materialien gefolgte Entwicklung. Der Kurs hat eine praktische Ausrichtung und sein Ziel ist es in erster Linie den Studenten ein breites Spektrum von polizeirelevanten

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Themen bereitzustellen, indem er erstens authentische jobbezogene Situationen darstellt und zweitens die Sprachaktivitäten dem Studentenbedarf zugeschnitten integriert, so dass alle Englisch-Sprachkenntnisse geübt werden können.

Schlüsselwörter: *Englisch für die Strafverfolgung, Kursgestaltung, die Bedürfnisse der Lernenden, aufgabenbasiertes Lernen, produktive und rezeptive Fertigkeiten*

1. Literature review

In order to understand what English for Law Enforcement is, one should take a closer look at the concept of ESP. English for Specific Purposes (most commonly referred to by its acronym: ESP) is a branch of EFL/ESL (English as a Foreign Language/English as Second Language) system, which is an essential part of ELT (English Language Teaching). ESP can be further divided into two main sub-branches, which are EAP (English for Academic Purposes) and EOP (English for Occupational Purposes). English for Law Enforcement is a variety of ESP encompassed by EOP.

Hutchinson and Waters (1987) argue that ESP is a more focused approach to language learning, whereby the content and method are based on the learner's particular needs to learn the language. Other theorists show that ESP course design is based on the assumption that if a group of learners' English language needs can be accurately specified, then this identification can be used to determine the content of a language program that will meet these needs (Munby, 1978).

The literature on ESP course design describes specific phases that a course developer has to take into consideration and follow through before and while designing a course for a specialized professional target group. Such steps include conducting needs analysis, deciding on the most appropriate teaching approach, developing proper materials and evaluating the general effectiveness of the course.

Needs analysis is the method to determine the content of an ESP course, being viewed as an extremely essential first step before designing an ESP course, if the course developers aim to design a course that will maximally benefit their learners (Wright, 2001). Various assertions on needs analysis display it as a process needed to determine the specific reasons for learning the language (Hutchinson and Waters, 1987) or as a process of determining the needs for which a learner or group of learners requires a language and arranging the needs according to priorities (Richards & Platt, 1992: 242).

Moreover, needs analysis is considered as the means to specify exactly what learners need to achieve through English (Robinson, 1991), the techniques and procedures for collecting information to be used in syllabus design (Nunan, 1988: 13) or the first step in course design which provides validity and relevance for all subsequent course design phases (Johns, 1991).

Generally, needs analysis refers to all those activities designed for collecting information that will serve as the basis for developing an ESP syllabus that will meet the needs of a particular group of learners. This *collection of information* is usually conducted through one or a combination of the following methods if the course developer aims for a more reliable needs analysis: a) questionnaires, which allow the course designer to determine the learners' purpose for learning the language (Nunan, 1989); b) authentic data analysis that might be employed to determine the features of the genre of the text required for the ESP context; c) interviews; and d) observation.

However, one cannot expect that the outcomes of the needs analysis will be absolute, but relative, as there are a number of factors that could affect its results such as the people asked; the questions employed and the interpretation of their responses (Dudley-Evans & St. John, 1998).

The next step in the ESP course design is the selection of the ***teaching approach***. Among theorists it has been argued that "task" represents the basis of syllabus design in second language acquisition (Richards, 2001: 161) and tasks function as a vehicle of presenting suitable target language models (Long & Crookes, 1991: 43). For this reason, when it comes to designing a task-based ESP course it is essential that the concept of "task" be clarified. In the literature there are two meanings attached to this concept: there are pedagogical and real-world tasks. According to Richards (2001: 162) *pedagogical tasks* are specially designed classroom tasks that are intended to require the use of specific interactional strategies and may also require the use of specific types of language (skills, grammar, vocabulary), whereas *real-world tasks* are tasks that reflect real-world uses of language and which might be considered a rehearsal for real-world tasks.

An ESP syllabus is inherently organized on certain criteria which allow the amount of knowledge to be learnt to be arranged into manageable units. Thus, Hutchinson and Waters (1987: 85-89) show that there is an array of syllabi an ESP course could follow such as: topic, structural/situational, functional/notional, skills or task-based syllabus. However, any teaching materials may be designed according to several of the above syllabi, one of them operating as the main organizing criterion, while the others may function simultaneously. All course books contain texts, which are about particular topics, that is why an ESP course will automatically have a general topic syllabus, but the need to make students practice the language imposes also the use of tasks based on language processing skills.

When the previous step has been finished, the ESP course designer moves on to the next, which is ***materials development***. The proper way to design an ESP material is to start by looking for appropriate input, examining the language and content in it, and then developing tasks in which the language aspects and content will be used (Hutchinson and Waters, 1987: 109). Therefore, when it comes to designing ESP teaching materials, after the steps of needs analysis and syllabus outline have been completed, there are three possible alternatives an ESP teacher or developer may choose from: *materials evaluation*, which means to select from existing materials; *materials development*, which refers to the teacher's option of writing his/her own materials and *materials adaptation*, whereby the existing materials are subject to alteration or adjustment (Hutchinson & Waters, 1987: 96).

When developing materials, there are certain guidelines that can orient an ESP course developer: materials have to give students a stimulus to learning by suggesting interesting texts and enjoyable activities; materials organize the teaching and learning process by a clear and coherent unit structure and, last but not least, materials should provide models of correct and appropriate language (Huchinson and Waters, 1987: 107-108).

The last but not the least important step in the ESP course design process is ***course evaluation.***

Course evaluation usually reveals how well the course objectives are met (Hutchinson & Waters, 1987: 152). In other words, it gives an indication of how much the course meets the educational needs it was designed for or whether it is justified in its present form. It may also give ESP teachers an idea about those course objectives that have not been fulfilled so as further necessary adjustments to the course syllabus could be made in terms of revisions or clarifications.

ESP practitioner can use several methods to evaluate an ESP course such as: test results, questionnaires, discussions; interviews or informal methods, for instance conversations or comments (Hutchinson & Waters, 1987: 153-154).

Evaluation is usually conducted at the end of the course and those involved in the course evaluation process are the parties closely concerned with the ESP course, namely the ESP teachers, the learners and the sponsors or the beneficiaries. All these individuals could provide useful information about what needs to be improved or altered in the ESP course so that its aims be met or how well the ESP course prepared the learners for certain target situations.

2. Description of the course design process

The context

To begin with, a brief description of the institution in charge with the training of prospective police officers (which is the focus of our case study) should be made. In our country this is the responsibility of the Police Academy, which is a state budgeted higher education institution, part of the national academic system and subordinated to The Ministry of Home Affairs, as sole beneficiary of the graduates trained here. Although it has undergone various reorganization processes, the police academy still prepares its students for several strands of law enforcement such as police, border police, penitentiaries, gendarmerie, firefighters and archives, which correspond to as many faculties (Police Faculty, Firefighters Faculty, Border Police Faculty, Gendarmes Faculty and Archives Faculty).

The students enrolled in the Police Faculty (which is the focus of our study), who are trained in the "Public order and national security" Bachelor's degree field, usually undertake further specialization in various areas of policing such as criminal investigations, fraud and financial crime investigation, countering organized crime, forensics, traffic police, public order, transport police etc. as specified in the curriculum. Therefore, due to the students' specialized police training within the academy, a language teacher has to adjust the foreign language syllabus, the English language one in particular, so as to both facilitate the acquisition of specialized law enforcement vocabulary and to practice and develop the students' language skills.

On the other hand, most of the police academy students who attend English classes have an advanced language competence, as they have to pass a rather high-level English language test when taking the admission examination to the academy. For this reason, attention should be paid both to the level of difficulty of the course unit tasks and the content of the law enforcement English language course.

Therefore, when designing the course for law enforcement students we have taken into consideration their English language proficiency, their language learning styles, focusing on the language learning skills they need to improve or practice more so as to help them in the language acquisition process, the most important topic areas of their concern, the police-related contexts they will be using English in.

Conducting needs analysis

As far as our initiative of designing and developing an English language course for law enforcement students is concerned, the needs analysis stage was conducted based on the use of a combination of procedures such as: a) *interviews* with both police academy students and representatives of The General Police Inspectorate, which is the main beneficiary of the Police Academy graduates, the future police officers, who will be employed in the units of The Romanian Ministry of Home Affairs. As a result of these interviews we have jointly decided what the most relevant topic areas that the police academy students need to become familiar with in terms of police-related specific terminology are. Moreover, this method associated with the *questionnaires* administered to students shed more light upon their needs in terms of the development or improvement of the language learning skills, functional language, lexis, or grammatical structures; and b) *observation*: Having taught English at the Police Academy for a considerable number of years, I had the opportunity of becoming familiar with the culture of a police organization, which further allowed me to draw some conclusions about what can constitute the English language needs of my students as concerns police vocabulary or topics of interest. In addition, observation contributed with more information about the students' learning styles, the methodological approaches, the types of tasks or activities they prefer.

Apart from these procedures, as it is a common fact in the ESP course design literature that one of the most important steps is to determine the students' language level, we administered placement tests to the students at the beginning of the first year of study at the academy. Nevertheless, the students' general English language proficiency is established prior to their enrolment as police academy students by means of a foreign language test at the entrance examination. The language test is usually an advanced level grammar test and its results provide relevant information as to what the candidates' language level is. However, the drawbacks of this test are that, on the one hand, it does not give any hint of the candidates' communicative competence and, on the other hand, the groups of students are not homogeneous as language level is concerned. Notwithstanding these aspects, the test gives sufficient input about the students' language level, which is more often than not upper intermediate to advanced, and this can be retested by means of a subsequent placement test.

Mainly, the needs analysis revealed that there is an imperative need for police academy students to acquire specific vocabulary related to the various strands of policing, to develop and improve their both productive and receptive skills, as well as be able to use English in real-life job-related scenarios.

Formulating course objectives

In the light of the findings revealed by the needs analysis and the consideration of the police academy context, a set of general objectives was formulated for the English language course addressed to the law enforcement students.

At the end of the course, the learners will be able to:

- use appropriate vocabulary and grammatical structures in given situations
- identify and use task-related vocabulary
- skim relevant texts for content and meaning, and scan them for specific information
- use appropriate language and skills while interpreting role-plays
- make critical judgements about police-related situations according to their own experiences
- write different police-related types of reports
- describe various police equipment components, organizations or situations
- express a variety of language functions in both speaking and writing
- use discourse markers to produce cohesive communications etc.

Selecting course content

As a result of the needs analysis, we were able to decide together with the beneficiaries upon the most relevant broad topic areas the future police officers should be taught in a course addressed to law enforcement professionals. These broad topic areas were converted into 14 units, which were further organized in main sub-topics, as in the table below. The units were arranged in an easy-to-follow sequence, from general to more specific topics such as: *police organisation and ranks, police career sand training, police uniform and equipment, law enforcement weapons and vehicles, police ethics, police powers and procedures*, *police duties and responsibilities, types of crimes and criminals, punishments and the prison system, police investigations, international police cooperation, police force and the media etc.* The table below shows a sample of how the unit topics and sub-topics were organised.

As far as the *vocabulary* is concerned, the course allows attendants to acquire general and semi-technical police vocabulary related to the most relevant policing matters (as mentioned above). Moreover, the lexical component of the course will focus on unknown vocabulary specific to police tasks/ activities, spelling, word formation, phrasal verbs, compound nouns etc.

Table 1. English for Law Enforcement. Course Content Sample.

Units/Broad topics	Sub-topics
POLICE CAREER AND TRAINING	• What is a police officer? • A Police Officer's Selection, Education and Training (Romania, UK and US compared) • Police Recruitment Application Form • Police Recruitment Interview • A Police Officer's Oath of Allegiance
LAW ENFORCEMENT WEAPONS	• Handgun Components - Components of a Glock Pistol • Handgun Shooting Tips • Types of Police Weapons: Firearms, Less Lethal Weapons, Specialised Weapons, Body Armour • Handgun Shooting Positions and Techniques • Police Use of Firearms
TYPES OF CRIMES AND CRIMINALS	• Categories of Crimes • Types of Homicide • Types of Criminals • Causes of Crime • Types of Theft • Crime Incident Report and Victim/Witness Statement Writing

The course aims to familiarize law enforcement students with *language functions* by giving them the opportunity to practice: expressing opinions, arguing/bringing arguments, agreeing or disagreeing, explaining situations, contrasting and comparing situations, describing people/situations/equipment, summarizing, giving detailed information, making suggestions, speculating, justifying, giving instructions/orders etc. These functions can operate as course objectives and can be added to the above list of general objectives.

Moreover, the law enforcement students should be able to use all *grammatical structures* with a considerable degree of accuracy as they usually fit the upper-intermediate to advanced learner profile.

Choosing the teaching approach: Task-based learning

Embracing the "task-based learning" postulate and the belief that an ESP course is a learning-centred approach, while bearing in mind the results of the needs analysis stage, we have designed a task-based English language course for law enforcement students and professionals, oriented primarily on

the development and improvement of the students' language learning skills with a closer focus on the communicative competence. Thus, the course tasks have been designed to serve as a means to practise all four skills: speaking, reading, listening and writing. In addition, the course included both types of tasks: *pedagogical* and *real-world*.

Among the first category of tasks the course includes: filling in the gaps, matching words with their definitions, pairing words into collocations, answering comprehension questions/multiple choice questions/true-false questions/short answer questions, expressing opinions, contrasting and comparing things/ situations, translating words/sentences/short texts, brainstorming, word formation tasks, solving crossword-puzzles, finding synonyms/antonyms etc. The category of real-world tasks encompasses activities such as: interpreting role plays (police officer recruitment interview, enforcing police powers and procedures, executing an arrest warrant, carrying out an intimate/vehicle search or a crime scene examination etc.), writing a police job application form/ a police report (incident/crime scene report)/ an action plan/ a media release, designing a police recruitment campaign poster, problem-solving, filling in a suspect's description form etc.

Focusing on both productive and receptive skills

When designing the English language course for law enforcement students and professionals we have broken down the topic-centred units into task-based activities, thus organizing the teaching materials around tasks focused also on the development of learning skills.

Therefore, the coursebook units usually fit the patterns described below. Moreover, we have also included some teaching samples we have developed and are integrated in the coursebook units, illustrating tasks focused on the practice of each learning skill.

Speaking input: At the beginning of the instructional sequence there are usually unit topic-related questions (asking for opinion, discussing topic-related concepts, contrast and compare facts/situations) or topic-related visual input or diagrams used as a starter for discussion or brainstorming new vocabulary. On the other hand, at the end of the instructional block, when specific vocabulary has already been introduced and practiced through various vocabulary tasks, then speaking practice can be carried out through *role-plays* (e.g. police recruitment interview, tasks performed by a police officer on a patrol job, carrying out police procedures such as asking for people's IDs, stop and search, arrest and detention, interviewing witnesses or interrogating suspects etc.). However, speaking tasks are included all through the unit, not only at the beginning or end of the

instructional block. Generally, speaking tasks can be inserted as a follow-up after a reading input, when students may – for instance - be asked to express their opinion, bring pros and cons, offer solutions or solve problems etc.

Table 2. Instances of speaking tasks

1. Speaking task as follow-up activity after a reading input on ***Police Use of Firearms.*** *Discuss the following issues:* *Is it a good idea for law enforcement personnel to be equipped with firearms? Why/Why not? Explain.* *What do you think about alternative non-lethal weapons used by the police? Are these effective in dealing with perpetrators?* *When can law enforcement officers use their firearms and/or a greater amount of force?*
2. Speaking task as a round-up activity at the end of a broad unit on the topic of ***police corruption***. *Here is a list of methods of controlling police corruption. How effective do you think they are? Discuss.* ✓ Improved pay scales for officers ✓ Teaching ethics to police officers ✓ Routine transfers of police officers ✓ Internal affairs departments ✓ Integrity officers ✓ Corruption investigations
3. Using diagrams/charts/visual aids as a starter for discussion. For example, when discussing about the topic of ***crime scene investigation***, students may be presented a photograph of a crime scene and asked to talk about the appropriate steps that should be followed in order to investigate the case.

Reading input: usually followed by tasks such as: discussion, answering comprehension/multiple choice or true-false questions, inferring meaning from context, finding the gist or specific information, organizing new vocabulary in categories/diagrams/charts, matching pictures with paragraphs, matching titles with paragraphs, answering close-ended questions etc.

Table 3. Examples of reading tasks

1. There are a few common ***types of fingerprints*** that can be found at a crime scene. Match the definitions with the names conventionally given to fingerprints.
A Patent (visible) prints B Plastic (molded) prints C Latent prints D Exemplar prints

Types of fingerprints

….. 1. These are also called known prints and they name fingerprints deliberately collected from a subject, whether for purposes of enrolment in a system or when under arrest for a suspected criminal offence.

…... 2. Any chance or accidental impression made by the transfer of oils and/or perspiration present on the skin ridges onto a surface. Electronic, chemical and physical processing techniques allow visualization of these invisible print residues.

…... 3. They are chance friction ridge impressions which are obvious to the human eye and which have been caused by the transfer of foreign material such as ink, dirt, paint or blood from a finger onto a surface.

..... 4. Prints that are friction ridge impressions left in a material that retains the shape of the ridge detail, such as melted candle wax, putty, dust, soap or thick grease deposits.

(Text adapted from http://en.wikipedia.org/wiki/Fingerprint)

2. Read about the importance of DNA in today's police investigation. Then give short answers to the comprehension questions below.

DNA in police investigation

Just as today's law enforcement officer has learned to look routinely for fingerprints to identify the perpetrator of a crime, that same officer needs to think routinely about evidence that contains DNA. Recent advancements in DNA technology are enabling law enforcement officers to solve cases previously thought to be unsolvable. Today, investigators with a fundamental knowledge of how to identify, preserve, and collect DNA evidence properly can solve cases in ways previously seen only on television. Evidence invisible to the naked eye can be the key to solving a residential burglary, sexual assault, or child's murder. It also can be the evidence that links different crime scenes to each other in a small town, within a single state, or even across the nation. For example, the saliva on the stamp of a stalker's threatening letter or the skin cells shed on a ligature of a strangled victim can be compared with a suspect's blood or saliva sample. Similarly, DNA collected from the perspiration on a baseball cap discarded by a rapist at one crime scene can be compared with DNA in the saliva swabbed from the bite mark on a different rape victim.

(Text adapted from http://www.cyberbesttech.com/DNA_Tracker.aspx)

(1) What sort of knowledge has an officer gained?
(2) What is the aim of the officer's job?
(3) What else should the officer consider?
(4) What supports officers in their investigations?
(5) What abilities do officers need today?
(6) What is the main feature of DNA evidence?
(7) How can the police solve a case spread in various areas?
(8) Where can the DNA of a stalker be obtained from?
(9) What other 3 samples, except saliva, can provide DNA evidence?
(10) Where is the rapist's saliva taken from?

Most often the reading input is a very suitable lead for subsequent **vocabulary practice tasks** such as: finding synonyms or antonyms for specific vocabulary items, filling in vocabulary diagrams, translation of specific words or phrases, word-formation or gap-fill exercises, finding collocations with key-words, filling in word puzzles, matching word with definition, matching words to make up collocations etc.

Table 4. Vocabulary practice tasks

1. Skim-read the text again to find word associations containing the word *"rank"* as in the examples given.

*…**police**…*		……
……	***RANK***	……
……		.***insignia***…
……		……

2. The text below relates what the next steps are *after the crime scene examination.* Fill in the gaps with the words from the box. There is one extra word you do not need to use.

autopsy……statements……detained investigation……
warrants……technicians……restrained……evidence……
detectives……coroner……criminalists

Follow-up Investigation

In major crimes like a bombing or homicide, (1)…….. are called in. Their job is to take over the (2)…….. Witnesses are (3)…….. and interviewed. Some are transported to headquarters to make formal written (4)…….. The detectives then prepare to obtain whatever search (5)…… they may need. If there's a body, the (6)…….. or medical examiner checks it to be sure it's human (some are in bad condition), and decides whether there is reason for an (7)…….. While that's going on, the (8)…….. – also called crime scene, evidence or identification (9)…….. – are hard at work searching for (10)…….. and collecting whatever they find.

(Text adapted from http://www.teacherweb.com)

3. Read the following extract and complete the gaps with the appropriate forms of the words given in brackets.

DNA in police investigative work

Police officers will be able to fingerprint and take a DNA sample from anyone they arrest under (0)….**proposal.**... (*propose*) announced yesterday by the Home Office. At the moment, police are only allowed to record these details when a suspect has been charged. But an (1)……(*amend*) to the criminal justice bill will extend the power.

The Home Office minister Lord Falconer said this would help to verify a suspect's identity and prevent (2)…….. (*crime*) "evading (3)…….. (*detect*) by giving the police a false name and address". He added: "Taking fingerprints means the police can be 100% certain about the identity of the person in their custody".

The fingerprints and DNA samples will not be destroyed if the suspect is released without charge. They will be added to the (4)…….. (*nation*) DNA and fingerprint databases.

Ian Blair, the deputy commissioner of the Metropolitan Police, welcomed yesterday's (5)…….. (*announce*). He said it would "allow violent people to be identified more quickly".

John Wadham, the director of Liberty, said the new power showed the (6)…….. (*govern*) wanted to treat people as suspects not citizens. "If there is any (7)…….. (*sign)* evidence that someone is involved in a crime, these very personal (8) …….. (*mark*) can already be taken. This simply treats everyone who has ever been (9)…….. (*wrong*) arrested as guilty by (10) ……..(*imply*).

(Text adapted from The Guardian, 27/03/2003)

Writing tasks: e.g. filling in a suspect's description form, a police recruitment application form or a police report, a crime scene investigation report, writing a police media release, filling in a victim/witness statement etc. Some other writing tasks included in the coursebook involved carrying out project-works, focused, for instance, on designing a poster for a police officer recruitment campaign, for combating drug abuse among teenagers or fighting corruption in police force etc.

Table 5. Samples of writing tasks

Victim/Witness statement You are a police officer on duty. An individual comes to the police station and claims they have been *victims/witnesses of a crime* (e.g. robbery, rape etc.). You ask these persons to write down *a statement* detailing the crime they have been victims/ witnesses of. You may use the sample form below.
STATEMENT I, _____, _____, *(name and surname of the declarant)* *(address)* _____, _____, state the following: *(location)* *(occupation)* _____ _____ *(details of the incident or event)*

I believe that the facts stated in this witness statement are true. Signature: _____ Date: _____
(Adapted from http:// www.ipo.gov.uk)

Listening input: usually followed by one or more of the following tasks: comprehension/multiple choice/true-false questions, discussion, fill-in exercises etc.

Table 6. Listening tasks

*Listen to the tape about **police officers' professional risks** and fill in the sentences below with the appropriate information you have heard on the tape.*

1. Deaths of police officers that take place while they are performing their duties are called _____.
2. Increasingly, the police officers run the risk of being victims of _____, but their deaths are mostly due to _____.
3. The police officers' involvement in traffic accidents may be occur while _____ or _____ or when working on _____ or in _____.
4. Officers' deaths caused by suspects' killings represent a smaller _____.
5. A 2005 statistics in U.S. shows that the percentage of police officers killed in _____ is larger than the percentage of _____ officers' deaths.
6. Families of officers fallen on duty may receive _____.
7. _____ are a form of remembrance of the police officers who have been killed in the line of duty.
8. Between 2000 and 2010 in U.K. the largest proportion of officers killed on duty was due to _____, while they were travelling to and from duty.

Transcript: Police officers' Professional Risks

Line of duty deaths are deaths which occur while an officer is conducting his or her appointed duties. Despite the increased risk of being a victim of a homicide, automobile accidents are the most common cause of officer deaths. Officers are more likely to be involved in traffic accidents because of their large amount of time spent conducting vehicle patrols, or directing traffic, as well as their work outside their vehicles alongside or on the roadway, or in dangerous pursuits. Officers killed by suspects make up a smaller proportion of deaths. In the U.S. in 2005, 156 line of duty deaths were recorded of which 44% were from assaults on officers, 35% vehicle related (only 3% during vehicular pursuits) and the rest from other causes: heart attacks during arrests/foot pursuits, diseases contracted either from suspects' body fluids or, more rarely, emergency blood transfusions after being shot or stabbed, accidental gun discharges, falls and drowning.

Police officers who die in the line of duty, especially those who die from the actions of suspects, are often given elaborate funerals, attended by large numbers of fellow officers. Their families may also be entitled to special pensions. Fallen officers are often remembered in public memorials, such as the National Law Enforcement Officers Memorial in the U.S., the National Police Memorial in the U.K. and the Scottish Police Memorial, at the Scottish Police College.

In the United Kingdom, over a period of 10 years starting with 2000 there were 143 line of duty deaths: 54 in road accidents travelling to or from duty, 46 in road accidents on duty, 23 from natural causes on duty, 15 from criminal acts, and 5 in other accidents.

(Text adapted from http:// en.wikipedia.org/wiki/Police_officer)

Materials development

As for the process of designing our English language course for law enforcement, we resorted primarily to materials development and secondly to materials adaptation. But, since the materials adaptation implies actually the prior two processes, that means we eventually made use of all the options available to turn the ESP syllabus into teaching materials. Nevertheless, the materials development was the main option that covered an extensive amount of the final law enforcement teaching materials and this was due to the lack of prior English teaching materials designed for the field of law enforcement.

For this reason, at the time the coursebook was being developed, the materials included in the course had been carefully collected from a wide array of authentic sources, both written and visual, in order to fit the topic areas relevant for the students' lexical needs as they had been identified by the needs analysis. Then the materials went through a thorough process of selection at the end of which only those texts that adequately met the course objectives were kept. Therefore, the course for law enforcement students and professionals is the result of an extensive process of documentation and selection of police-specific resources followed by the development of English language learning activities.

As a matter of fact, the most widely used documentation source was the Internet, which provided a large range of authentic policing-related texts, and the second source consisted of courses and teaching materials developed by our colleagues teaching various law enforcement specializations to police academy students. The texts selected have been altered and converted into Law Enforcement English teaching materials in order to serve as suitable tasks for practicing both productive and receptive skills and for facilitating the students' acquisition of English law enforcement specific vocabulary. For each task developed based on either of the two sources mentioned above, the original

source of the text or whether it has been adapted or not has been indicated between brackets and in the reference list at the end of the course. However, the original sources represented only the starting point that allowed us to put to use our creativity in the task development process.

Learner assessment and course evaluation

In order to assess the students who attended the course for law enforcement purposes, we usually used achievement and proficiency tests. As a rule, the achievement tests take the form of written and oral semester and yearly tests, which mainly assess the acquisition of police and legal vocabulary and the students' ability to communicate effectively on police-related topics or in police officer's job situations. Whereas the proficiency test at the Police Academy is a pass-fail, standardized written test administered at the end of the academic cycle. Its aim is to assess students' general competence in English for law enforcement. All these tests offer a very good insight on the overall effectiveness of the course.

As for the evaluation of the English language course for law enforcement students we have designed, we resorted to discussions with peers and feedback questionnaires administered to Police Academy students who attended the course in order to extract valuable information about the extent to which the course prepared them for real-life situations they would be facing as police officers. In addition, the results of both the achievement and proficiency tests have provided input on how well the students acquired the specialized terminology of the policing field and the degree to which they are able to cope with police-related communicative tasks (Table 7 displays a sample feedback questionnaire that can be used as a tool in the course evaluation process).

Table 7. Course evaluation – Sample feedback questionnaire

1. Has the course met your learning needs? 1- not at all 2- somewhat 3- quite a lot 4 – very much
2. Has the course helped you improve your English law enforcement vocabulary? 1- not at all 2- somewhat 3- quite a lot 4 – very much
3. Has the course covered all four learning skills: reading, speaking, listening, writing? 1- not at all 2- somewhat 3- quite a lot 4 – very much
4. Has the course offered opportunities for developing your communicative ability? 1- not at all 2- somewhat 3- quite a lot 4 – very much
5. Has the course exposed you to tasks that mimic real-life job-related situations? 1- not at all 2- somewhat 3- quite a lot 4 – very much
6. How effective do you think the organization of the course is? 1 – not at all effective 2 – quite effective 3- effective 4 – very effective 5 – extremely effective

7. How suitable do you think the topics covered by the course are?
1 – not at all suitable 2 – quite suitable 3- suitable 4 – very suitable 5 – extremely suitable
8. How practical are the tasks included in the course?
1 – not at all practical 2 – quite practical 3 - practical 4 – very practical 5 – extremely practical
9. How useful do you think the course is?
1 – not at all useful 2 – quite useful 3 - useful 4 – very useful 5 – extremely useful
10. What would you recommend to the course manager in order to improve the course?
……

3. Conclusions

The process of planning and designing an appropriate Law Enforcement English course proved to be a rather challenging one due to the complexities of such an approach, which requires that extreme attention be paid to various facets of the language learning process so as to meet the specific English language needs of the target group and produce a learner-centred course. Moreover, the task of designing an English language course for a particular professional group requires an experienced teacher with considerable ESP teaching and materials development practice.

An ESP course designer should be able to adequately go through all the steps involved in the designing process. Thus, when designing the English language course for the Police Academy students, we have learned that it is of paramount importance to accurately identify learners' learning needs in order to develop proper teaching materials to meet them. This stage is usually followed by others such as drafting the course objectives, outlining the syllabus framework based on the teaching theory the ESP course developer embraces, then evaluating, adapting or developing course materials and ending with the learners' assessment and course evaluation.

An educational environment such as the one at the Police Academy, where the students are trained for the police officer profession, required a foreign language syllabus adjusted to the students' specializations in all policing branches. English language makes no exception. Thus the English language syllabus had to be tailored so as to meet the students' need to learn the specialized terminology in English and be able to use English in specific police contexts. When outlining the English language course for law enforcement professionals, attention has also been paid to structuring materials around tasks meant to develop all productive and receptive language skills such as speaking, listening, reading and writing.

To sum up, the experience of designing an English language course for law enforcement students revealed that it has to be a learner-oriented approach, as satisfying learners' needs has an important influence on their motivation and, subsequently, on their achievements. In addition, undertaking such an approach will allow the target group to participate in the syllabus design, as they are more aware of their own professional context, the tasks or activities they need to use English in.

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A QUALITATIVE APPROACH OF THE ASSOCIATION BETWEEN THE TODDLER'S ATTACHMENT STYLE AND THE DYADIC INTERACTION WITH THE MOTHER

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ABSTRACT. The quality of toddler's experience with the caregiver impacts the structuring of the internal working models of attachment (Bowlby, 1980, 1988), further used as means of comfort and security, and prototypes for later close relationships. Using inductive qualitative techniques, our study aims to describe specific schemes of mother-toddler interaction, for each of the attachment styles. Semi-structured interactions of 27 mother-child dyads were videotaped in their familiar environment and the films were qualitatively analyzed, for each group of toddlers previously identified as having the same attachment style. The interactions of secure toddlers and their mothers were marked by synchronized actions, joy of interacting, closeness, and security. Mothers of ambivalent children displayed a more dominant action, with discordances between the social and psychological level of communication. Avoidant toddler-mother dyads presented a higher balance between their relational spaces, maintaining contact, with a low level of intimacy. The absence of a coherent strategy defined the interaction between the toddlers with disorganized attachment and their mothers. Our results confirm previous findings in the field of attachment in early childhood and add up to these results by providing a methodology to approach these interactions and the use of video recordings as ways to develop interventions aiming to increase the attachment security.

Keywords*: mother-toddler interaction; attachment styles; video analysis, qualitative research*

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ZUSAMMENFASSUNG. Die Qualität der Interaktion von Kleinkindern mit ihren Bezugspersonen wirkt auf die Strukturierung der inneren Arbeitsmodelle (Bowlby, 1980, 1988) ein. Diese Arbeitsmodelle werden als Mittel in der Suche nach Trost und Sicherheit und als Prototypen für spätere enge Beziehungen benutzt. Unsere Studie nimmt sich vor, Mutter-Kleinkind-Interaktionen für jeden Bindungstyp durch induktive qualitative Techniken zu beschreiben. Dazu wurden die halbstrukturierten Interaktionen von 27 Mutter-Kind Zweiergruppen in ihrem gewohnten Umgebung auf Video aufgezeichnet. Danach wurden die Aufnahmen für jede Gruppe von Kleinkindern, die zuvor die gleiche Bindungsart aufgewiesen hatten, einer qualitativen Analyse unterzogen. Die Interaktionen zwischen sicher gebundenen Kindern und ihren Müttern sind von synchronisierten Handlungen, Freude an Interaktion, Nähe und Sicherheit geprägt. Die Mütter von ambivalent gebundenen Kindern zeigen sich dominanter in ihren Handlungen, wobei auch Widersprüche zwischen der sozialen und psychologischen Kommunikationsebene zu beobachten sind. Das Gleichgewicht zwischen den Bindungsräumen von vermeidenden Kindern und ihren Müttern war besser, sie halten Kontakt, jedoch mit kleinem Vertrautheitsgrad. Die Interaktion zwischen desorganisiert gebundenen Kleinkindern und ihren Müttern wies den Mangel an einer kohärenten Strategie vor. Unsere Ergebnisse bestätigen vorausgegangene Untersuchungen über frühkindliche Bindung und ergänzen diese durch die Erstellung einer Analysemethode dieser Interaktionen und durch die Verwendung von Videoaufnahmen als Entwicklungsmöglichkeit für Interventionen zur Verbesserung der Bindungssicherheit der Kinder.

***Schlüsselwörter**: Mutter-Kleinkind-Interaktion; Bindungstypen; Videoanalyse;* qualitative Untersuchung

Introduction

Early attachment and the characteristics of the interaction with the caregiver in early childhood are important indicators for interpersonal behavior, child's developmental progress and mental health later in life (Tryphonopoulos, Letourneau, & DiTomasso, 2014). The quality of early caregiving was linked to several mental health problems in adolescence and disrupted affective communication at 18 months of age was an important predictor for personality disorders and conduct symptoms at the age of 18 to 22 years (Lyons-Ruth, 2008), thus the importance of early identification of problematic features of the interaction between parent and child is underlined.

During the repeated experiences with the caregiver, the child develops internal representations of the attachment relationship, defined as working

models of attachment (Bowlby, 1980, 1988), structured within the various experiences and interactions (Ainsworth et al., 1978) and depending on their quality. These inner models will be further used as a source of comfort and security throughout the lifespan, but also as a prototype for the later close relationships of the individual (Schaffer, 2005; Snyder & Lopez, 2007), including the relationship that one establishes with one's own child (Madigan et al., 2015). In other words, attachment is a good predictor for the later development until adult age, with a high impact upon the representation of the self, the other, and the world, resulting in the level of psychological and relational health (Frey, Beesley, & Miller, 2006; Grossmann et al., 2002; Sroufe et al., 2005; Waters et al., 2000). Attachment security represents the basic trust in the attachment figure's availability and sensitivity in times of danger, distress, as well as in the capacity to offer protection, comfort, and appropriate response for the child (Ainsworth et al., 1978).

Attachment security cannot be measured directly and it can only be deduced by what is accessible and observable (Solomon & George, 1999). In this manner, by observing patterns of interaction and children's reactions through the Strange Situation laboratory procedure, Ainsworth (1970) described three attachment styles: secure (type B), insecure avoidant (type A), and insecure ambivalent/resistant (type C). A fourth category, the disorganized attachment style (type D), was later added by Main and Solomon (1986, 1990), for children who would not match one of the three above mentioned patterns.

Securely attached children display enjoyment in their interaction with the caregiver and also constantly use the caregiver as a secure base to explore the environment (Humber & Moss, 2005), they seek and accept comfort from caregivers (Johnson et al., 2010). Children with ambivalent attachment style do not show trust in the parent's availability, they show high distress when separated by their attachment figures and do not show decrease in their reactions when reunited with them. Also, the ambivalent child does not initiate exploration of the environment and seems to lack independence. The avoidant attachment style manifests as inability of the child to rely on the attachment figure, hostility, and indifference, rejection of the parent. The child with disorganized attachment style manifests confusion in the presence of the parent, anger and rejection alternating rapidly and unpredictably with attempts to please the parent (Andreassen & Fletcher, 2007), attempts of the child to control the parent, either by showing care or by punitive behaviors (Humber & Moss, 2005). These patterns of behavior and affect were also found in orphan children (Collins, 2008), but in these children disorganized attachment was more prevalent than in the general population. Disorganized attachment was linked to the child's experience of the parent as either frightening or

nonresponsive to his signals of distress (Collins, 2008). These patterns of maternal behavior, linked to child's attachment, were identified in young children as well as preschoolers and school aged children (Humber & Moss, 2005).

One of the first questions when referring to attachment is related to the factors that favor the development of a secure base relationship, as opposed to an insecure one. If the initial research indicated mother's sensitivity and responsiveness (Ainsworth, 1973) as having a crucial impact on child's attachment security, later results related to main behaviors of the caregiver added new dimensions: mother's prompt responsivity to child's distress (Crockenberg, 1981; Del Carmen et al., 1993); moderate and well adapted stimulation (Feldstein et al., 1995); interactional synchrony (Isabella & Belsky, 1991; Isabella, Belsky, & von Eye, 1989; Leyendecker et al., 1997); involvement, warmth, and responsivity (Bates, Maslin, & Frankel, 1985; O'Connor, Sigman, & Kasasi, 1992), tendency to focus on and respond to child's cues as if they were reflections of the child's feelings (mind-mindedness, Meins, 2013), in attunement to the child's cues and the child's internal states. Van den Boom's study (1990) draws attention to the attentive maternal behavior to her child's exploration, as a prerequisite for the child's synchronization and security.

Children's insecure attachment was linked to other indicators in caregiver's interactive behaviors. Intrusive parental style, characterized by overly stimulative, highly controlling interactions, was related to children's ambivalent attachment (Madigan, Moran, & Pederson, 2006), while avoidant attachment is associated with caregiver's lack of responsivity and low level of involvement (Vondra, Shaw, & Kevinides, 1995).

More recent studies focus on identifying attachment insecurity predictors from describing mother-infant interaction patterns (Beebe et al., 2010), as the quality of early dialogue between caregiver and child was found to be even more predictive for mental health problems compared to attachment classification (Lyons-Ruth, 2008). A wide microanalysis of the interactional and communicational process was conducted for 84 mother-infant dyads, playing in laboratory settings, at 4 months and again at 12 months of age. Coding and systematizing observed behaviors led Beebe's team to find categories of information, regarding: attention orientation of the two actors, affect, touch, and spatial orientation.

A later paper of the same American psychiatrist (Beebe et al., 2012) describes her approach as based on dyadic systems, as an alternative to the long tradition of assessing maternal characteristics impact on child's attachment security. Bebee suggests examining individual contributions of both mother and child, within different patterns of dyadic interactions involved in attachment development (Beebe et al., 2012; Beebe & Steele, 2013). The focus of all author's

work was bringing up to clinicians' attention the possibility of predicting attachment security at 12 months of age, with a high interest in the disorganized attachment style, from the dyad's interaction microanalysis at 4 months.

Based on previous research results, our rationale for the study was the need to further address the specific behavioral features of the mother-child interaction for each of the four attachment styles of the children, in order to enrich our knowledge of the differences and similarities of children's behaviors, maternal behaviors and synchronous behaviors within the four styles. This would be useful for both research in the field of attachment theory and for the practice focused on the development of interventions targeting the increase of attachment security in children.

Context and Purpose of the Study

The current paper is derived from a more extended doctoral research on the intergenerational transmission of the attachment models and focuses on describing mother-child patterns of interaction observed in the dyads' natural environment (at home), associated with each of the four attachment styles of the children (secure, insecure ambivalent, insecure avoidant and disorganized).

The purpose for describing these patterns of interaction holds a theoretical and a practical side. On one hand we aim to contribute to the attachment literature, while on the other hand to provide an accessible base for developing specific guidelines for professionals, so they can identify the patterns of interaction in a home setting, compare them with those specific to the secure model and make the first steps in changing from an insecure to a secure relationship between caregivers and their children (Ionescu, 2013).

Method

Sample

A number of 27 mother-child dyads were involved in our study. They were selected from a larger sample used in the more extended research mentioned above, based on their willingness to participate in the videotaped interaction with their child. Therefore, we used a convenience selected sample in the further data analysis.

The age range of mothers participating in the study was 24 to 42 years (mean=32 years, SD=3.53), all of them from urban areas. In terms of level of education, most of the participants in our study were highly educated persons (holding university degree of higher) and only two of them had high school

education. With respect to their professional membership, the mothers belonged to the following professional domains: exact sciences (jobs like mathematicians, engineers, economists), education, literature and linguistics, social sciences (sociologists, psychologists, historians), law, medical professions (nurses, medical doctors) and a small number unqualified professions (workers), thus proving the sample belonging to the middle class in terms of level of income. All the participant women were married, and most of them (82,5%) had one child, while a smaller number (17.5% of the total) had two children.

Regarding the pregnancy preparation, 12 of the mothers took Lamaze childbirth classes (44.44% of the total number), three attended other childcare programs (11,11%), while the rest of them did not take any structured lessons. A percentage of 51,7% of the mothers were on maternal leave and 48,3% returned to work 5 to 21 months prior to the research period.

The children were aged between 14 to 35 months (mean age 22.15 months) and 40.74% of the total number were females.

Measures

Child attachment style

The need to find a right assessment method for the attachment style in the first three years of life is important, given the crucial importance that this period has for child development (Bransford, Brown & Cocking, 2000). Research in neuroscience shows an accelerated brain development before this age, with a progressive decrease of its plasticity by the age of ten (Riley, 2003). Proper assessment supports the development of effective early interventions for optimizing the level of attachment security. Most of the studies in the field use Ainsworth's Strange Situation standardized laboratory procedure (Ainsworth et al., 1978) for assessing children's attachment with their mothers by analyzing the reactions they have during the eight different separation-reunion episodes. However, besides being time consuming, the procedure is stressful for both child and mother and several alternatives were developed for use in practice and research. One such relatively new alternative to the Strange Situation is the Attachment Q-Sort (AQS) (Waters & Deane, 1985, Andreassen & Fletcher, 2007), a technique less time consuming, simpler when analyzing data, yet holding the advantages of the mother-child interaction observation. Starting from this instrument and using data collected in more countries, a research team led by Kirkland and Bimler (Bimler & Kirkland, 2002; Kirkland et al., 2004) began in 1999 the development of a shorter and more accessible version of the AQS: Toddler Attachment Sort-45 (TAS-45). TAS-45 is a new observational

measure of attachment strategies of children in interaction with the mother and stranger, displayed in the home setting and its initial purpose was the assessment of child-parent attachment quality for 16 to 39 months children in the US national Early Child Longitudinal Study-Birth Cohort (ECLS-B; Andreassen, Fletcher, & Park, 2006). A comparison of various available measurements of attachment made by Tryphonopoulos, Letourneau & DiTomasso (2014) reveals several advantages of the TAS-45: the training required for use is less extensive than in the case of other measurements, the scoring is brief (10 minutes), though data collection is lengthy (60-90 minutes).

Several studies have been conducted for TAS-45 validation on different populations (Andreassen & Fletcher, 2007; Costea-Bărluțiu, 2010, 2016; Spieker, Nelson, & Condon, 2011, Titik Muti'ah, 2012). It has been used for the first time in Romania and studied for psychometric proprieties (a pilot study) by Costea-Bărluțiu (2010) in her doctoral research (published in Costea-Bărluțiu, 2016). The author found the instrument to be a promising alternative for the assessment of attachment in toddlers and she concluded that the measure can be successfully applied on Romanian population, also recommending the enlargement of the studied group for further investigation of the psychometric properties of the measure (Costea-Bărluțiu, 2010, 2016). Considering the advantage of the ecological validity of TAS-45 results, by allowing researchers to assess dyadic interaction in their homes, we also adopted the TAS-45 for evaluating children's attachment to their mothers (Ionescu, 2013). The items of the instrument are grouped in eight categories, reflecting various dimensions of attachment, such as: comfort in cuddling, cooperation, enjoyment of company, independence, attention seeking, separation distress, avoidance of others, demandingness, moodiness. With respect to psychometric properties, Costea-Bărluțiu (2010, published in 2016) reported an internal consistency of .60 to .95 for the various dimensions of attachment measured with TAS-45. Zaslow et al. (2009), Spieker et a., (2011) in Tryphonopoulos, Letourneau & DiTomasso (2014) found an interrater reliability of 82% for the whole measure, with .83 correlation for security scores and .92% for dependence scores and 100% agreement on classification of children according to their attachment style. Though these results are promising, further analysis is needed in order to prove the validity of the instrument for the assessment of attachment in toddlers.

The forty-five items of the instrument are sorted in two phases for each of the children assessed and subsequently a profile is established based on the scores for the eight categories. The child's profile is compared with the prototypic profile for each of the attachment styles and the child's attachment style is thus determined. In order to avoid the subjectivity bias, two raters should complete the measure for each child, but this procedure was not implemented in the current research.

Mother-child interaction

In order to describe the specific features of the interaction between mothers and their children, a semi-structured free play situation was set up at the dyads' home. Each mother was invited to play freely with her child, as they do it in the everyday life, with a set of toys offered by the researcher. Some of the toys that were available for the dyad to play with were: toddler puzzles, large pieces of construction blocks, a plastic frog with its baby frog, other plastic animals, and a baby doll. The sequence of interaction lasted around 10 minutes.

The set of toys consisted of items selected in order to be appropriate for this age (1-3 years), to be appealing and simulative for the child, to allow the mother and the child to perform a wide variety of different activities. The interaction was video recorded in order to perform the subsequent analysis.

Data analysis procedure

All movies were qualitatively analyzed by using ATLAS.ti 6.0 software for identifying main categories of behavioral elements and the relations between them. The aim was to describe certain patterns of mother-child interaction for each observation phase, for each group of children previously evaluated using the TAS-45 (see Ionescu, 2014) as having the same dominant attachment style. The software offers a powerful tool for qualitative research, allowing in-depth analysis of the video material.

We selected 2 minutes 'time frames' out of each movie videotaped for the mother-child interaction. The two-minutes time frames selected were matched by attachment style and were analyzed together with ATLAS.ti for extracting the dominant codes and the relations between them. Thus, the four identified patterns, one for each children attachment group (secure, insecure ambivalent, insecure avoidant and disorganized) were obtained and will be discussed below.

The qualitative analysis with ATLAS.ti implies the upload of each of the two-minutes video into the main file generated by the software (called 'Hermeneutical Unit'), then using the console to start, stop and select sequences (video 'quotations') for labeling them (the 'coding' procedure, summarizing the content of the selection).

For the ease of understanding and structure of information, we used in each code's label a letter indicating the actor performing the action (codes starting with 'M' refer to mother's behaviors, codes starting with 'C' refer to child's actions, while those starting with 'MC' refer to a synchronized action of mother and child. The acronym f1 represents an indication of the phase in the semi-structured observation.

Results

Children's attachment styles and maternal characteristics

Of all the children included in our study, 40.7% were securely attached with their mothers, while the percentage of ambivalent children (29.6% of the total number), avoidant and disorganized children (14.8% each of the two types) was rather high compared to those reported by other large scale studies in the US that used the same measure for attachment (NICHD, Andreassen & Fletcher, 2007). The distribution we found was however similar to the one that Costea-Bărluțiu (2016) found on a sample of 75 Romanian children coming from similar backgrounds. However, the percentage of insecurely attached children was rather high for a sample of typically developing children, coming from typical family backgrounds, with high education, from medium class Romanian families. As the distribution seems to be similar to the one found by other authors on Romanian samples, it should be further investigated on larger samples, in order to find out if this is a culture-specific feature or other factors such as the measure we used or the sample selection method contributed to these results.

Table 1. Distribution of attachment styles

	secure	ambivalent	avoidant	disorganized
Maternal participation in a prenatal Lamaze course				
Yes	4 (14.8%)	4 (15.4%)	3 (11.5%)	1 (3.8%)
No	7 (25.9%)	4 (15.4%)	1 (3.8%)	3 (11.5%)
Child's gender				
Male	7 (25.9%)	5 (18.5%)	2 (7.4%)	2 (7.4%)
Female	4 (14.8%)	3 (11.1%)	2 (7.4%)	2 (7.4%)
Total	40.7%	29.6%	14.8%	14.8%

We found no significant differences depending on maternal participation in Lamaze prenatal courses ($Z=.65$, $p>.10$), as tested with Mann-Whitney test for independent samples, thus showing that this variable did not influence significantly the distribution of children's attachment styles in the sample we analyzed.

Also, we found no significant differences between children's attachment style based on their gender ($Z=.55$, $p>.10$) and thus we will discuss the qualitative data derived from the video analysis for each of the attachment style, without considering other maternal or children characteristics, that in the current investigation had no effect on the distribution of attachment styles.

Features of the interaction for the secure attachment style (type B)

The secure attachment style was identified in 11 children from the group constituted for investigation. The coding operation of the mother-child interaction for the free play phase led to the development of 41 codes, of which 14 had a frequency[3] greater than 5 occurrences, with a maximum of 31 occurrences (of the 'mother asks the child questions' behavior), followed by the child's response ('the child responds to the mother'), with a frequency of 18 occurrences. We noted that for the most frequent codes, action refers successively, both to interventions of the mother and to synchronized answers of the child.

Presented below is the list of the 14 codes with a frequency higher than 5 occurrences.

Table 1. The list of codes with a frequency higher than 5 occurrences within the free game phase of secure attachment

Code: M_f1_the mother asks the child questions {31-0}
Code: C_f1_the child answers to the mother {18-0}
Code: M_f1_the mother talks to the child {12-0}
Code: MC_f1_the mother and the child cooperate to accomplish the task {12-0}
Code: C_f1_the child talks, asks {11-0}
Code: C_f1_the child looks at the toy {9-0}
Code: M_f1_the mother encourages the child {9-0}
Code: MC_f1_the mother and the child play with the same toy {9-0}
Code: M_f1_the mother encourages the child {8-0}
Code: M_f1_the mother talks in parallel with the stranger {8-0}
Code: C_f1_the child plays alone {7-0}
Code: C_f1_the child interacts with the stranger {6-0}
Code: C_f1_the child takes the toy {5-0}

For this situation, we can synthesize the types of interaction observed in the 11 films containing the secure type, in the following schema (Figure 1).

[3] The frequency is shown in the codes box between the brackets following the code description.

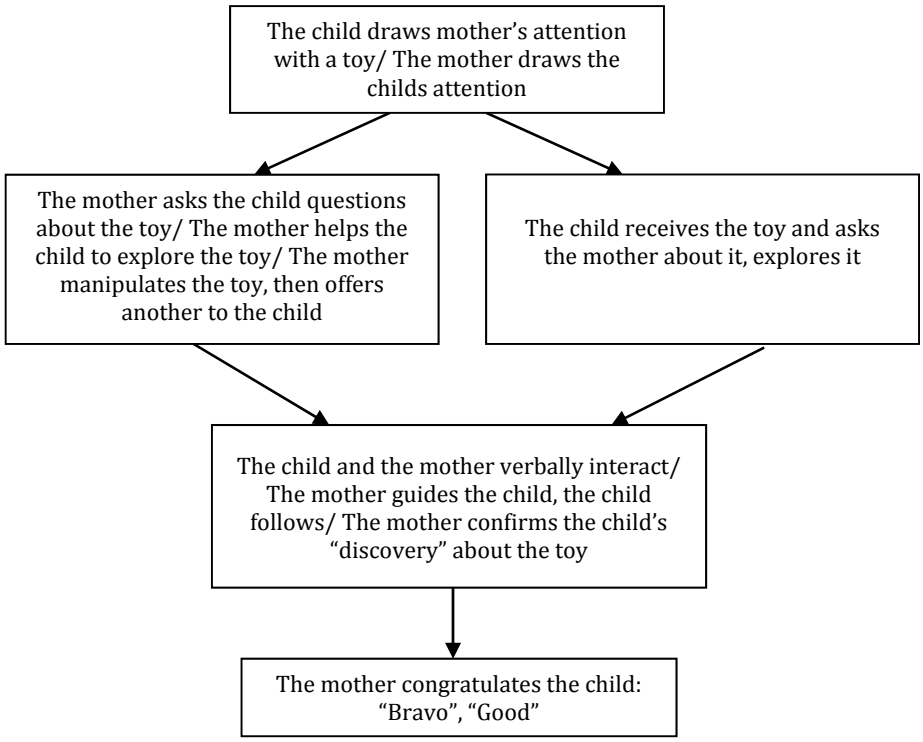

Figure 1. Mother-child interaction schema during free play involving the securely attached children

The mother or, often, the child, initiates the action by pointing at an object (toy). Then the mother asks clarifying questions to keep the relationship, starting from what the child had initiated (for example, the child shows his mother the frog and goes 'croak-croak' and his mother replies with a question: 'What is this? A frog?'). Even if the mother was the initiator, the child follows the same pattern by asking in her turn, in order to maintain contact.

What follows is a series of parallel transactions (questions and answers) as invitations to examples giving, exploration (the child, being curious, asks the mother 'What is that? 'What is there?' and she answers, explains, then asks the child to name additional characteristics of the object, or invites her to explore it: 'Look! What color is the end?'; 'How does it do that?'; 'What do we do with the little car?'). The sequence of successive interactions, with initiation and response, is repeated. The mother repeats the child's words a lot, as if she confirms to her that what she said is good ('cow goes moo'; 'yes dear, moo'). Mother also often praises or encourages the child, frequently giving her positive feedback ('Bravo!'; 'Well done ...'; 'How beautiful!'; 'X knows').

Usually in this free play phase *interaction seems to be able to continue endlessly. The simple joy of relating seems to represent in itself the fulfillment of the objective of obtaining attention, closeness, and security*. In fact, the interaction between the two even continues uninterrupted until the researcher stops them.

Features of the interaction for the ambivalent attachment style (C type)

The ATLAS.ti processing of the 8 recordings of the ambivalent children, for the free play phase, led to a number of 41 coded behaviors. Out of them, 15 had a frequency higher than 5 occurrences, with a maximum of 23 occurrences (the code 'mother asks the child questions'), followed by the 20 occurrences frequency (of the code that describes the action 'mother speaks to her child'). The following code in terms of occurrence frequency (14) refers to the child ('the child speaks unclearly'), after which all codes with a frequency greater than 10 occurrences describe the actions of the mother ('the mother shows her child a toy''; 'the mother prompts the child' or 'the mother prompts the child to answer') or simultaneous overlapping actions of mother and child ('mother and child interact simultaneously'). What we notice here, unlike in the case of the secure interaction model, is a richer action of the mother, while the child fades into the background, being left with a very limited relational space to respond.

Below we present the list of codes with a frequency greater than 5 occurrences within the free play phase of the insecure ambivalent attachment.

Table 2. The list of codes with a frequency higher than 5 occurrences within the free play phase of the insecure ambivalent attachment

Code: M_f1_the mother asks the child questions {23-0}
Code: M_f1_the mother talks to/with the child {20-0}
Code: C_f1_the child speaks unclearly {14-0}
Code: MC_f1_the mother and the child interact simultaneously/talk {13-0}
Code: M_f1_the mother shows her child the toy {12-0}
Code: M_f1_the mother prompts her child {12-0}
Code: M_f1_the mother prompts her child's answer by repeating it and congratulating her {11-0}
Code: C_f1_the child takes the toy, responds to her mother's prompting {9-0}
Code: C_f1_the child looks at the toy {9-0}
Code: C_f1_the child takes a different toy {8-0}
Code: C_f1_the child answers to her mother {8-0}
Code: M_f1_the mother takes the toy {7-0}
Code: C_f1_the child looks at the stranger {6-0}
Code: C_f1_the child refuses to cooperate, turns her back to her mother {5-0}
Code: C_f1_the child talks to her mother {5-0}

In order to describe the interaction patterns specific to the ambivalent attachment style of children, the 8 recordings were analyzed. The schema below (figure 2) shows the interaction model identified in the phase of free play involving the two protagonists.

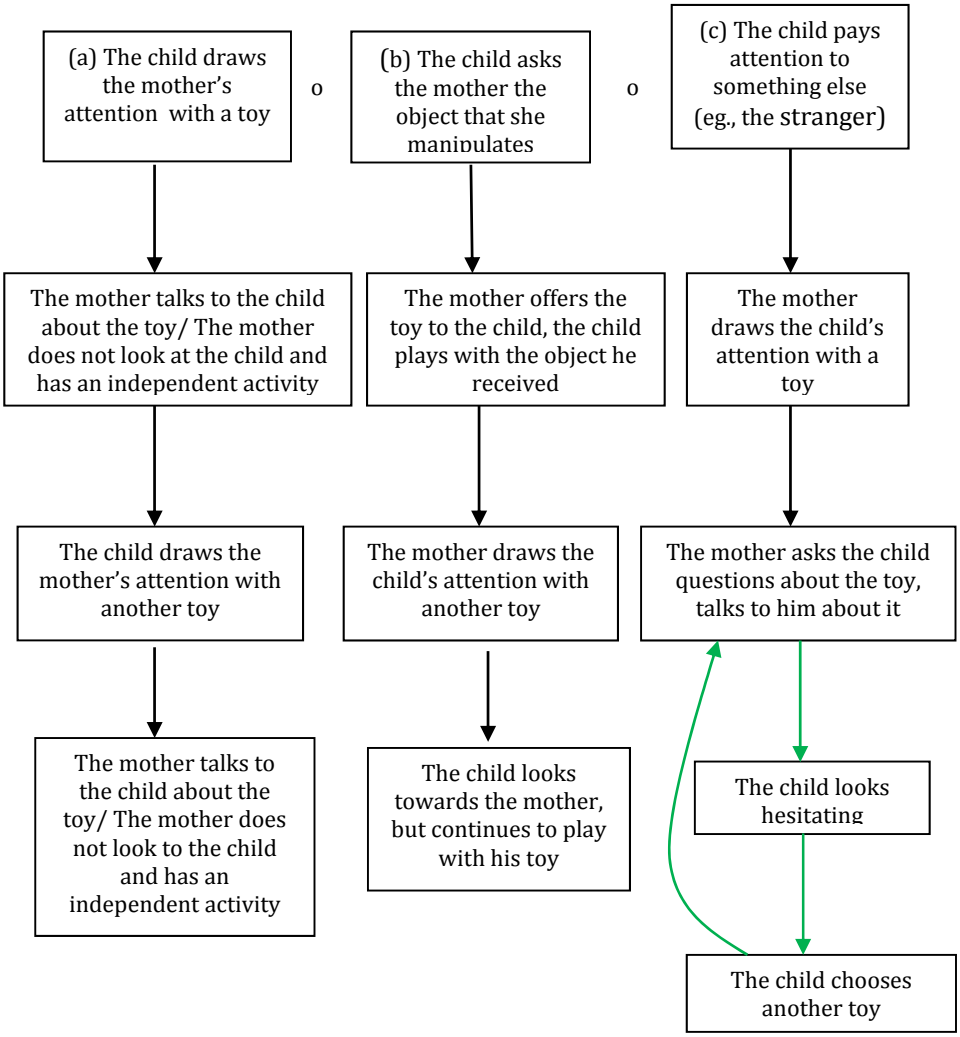

Figure 2. Mother-child interaction schema during the free play involving ambivalently attached children

The above figure shows that the child often initiates the activity either by (a) showing her mother the toy she discovered, or by (b) asking the mother to give her the object she handles. There is a third possibility (c): when the child is paying attention to something else – usually the stranger – the mother tries to get her attention (even if this interrupts an ongoing process between the child and the stranger, in this case the researcher). An important note regarding this situation is that the analysis of records in this study revealed the fact that the mother has a specific mimic, a high-pitched tone of voice (when calling her child), and a slightly intrusive behavior (sometimes she goes and pulls the child toward her by obvious physical gestures).

The continuation of the action is slightly different, depending on how it began (the cases described above). Thus, in case (a) where the child shows her mother a toy/ tries to draw her mother's attention with a toy, in most situations the next step is a double reaction of the mother: on a social level she repeats her child's words ('Yes dear, croak-croak!') or repeats the information given by the child without adding anything to communication, whereas at psychological/ non-verbal level she is involved in another activity (for example, she doesn't look at the child and continues her playing activity separately). In the next step, the child tries again to get her attention, showing her another toy. In most cases, the mother's response is the same, and the sequence is repeated, until the child gives up, sometimes tired of the mother's persistence.

In cases (b) when contact is initiated again by the child (this time by requesting the object the mother is already handling), the mother often responds by giving her the toy. Here one can already see the interaction structure specific to the ambivalent model-based relationship: although the child begins to play with the object she received, the mother shortly interrupts this activity by trying to draw her attention to another toy (basically she does not 'accompany' the child in her activity, like in the secure model case, but behaves as if she seeks, in her turn, attention from the child). Somehow 'demonstrating' that she adopted the model, the child develops behavior similar to that of her mother, as described at (a): (a) looks briefly to her mother (social level), but continues to play with the object already received (psychological level). Unlike the previous case (a), here the end of the interaction sequence (b) consists of the resumption of contact between the two protagonists: mother and child get to talk about the toy, yet the positive mimicry (expressing pleasure of interacting) is less present in comparison to the cases of secure attachment.

The situation type (c) in whose first stage the child pays attention to the foreign person or to another object, continues with the mother's action by which she aims to draw her child's attention with a toy (shows it to the child, speaks to her, asks her 'What is this?'; 'Look, a cow!'; 'How does the cow go?', etc.).

In the next stage, the child either looks at her all the time, or grabs the toy and begins to explore it. At this point, we can identify a new characteristic of the ambivalent interaction pattern: the child stops and chooses a new toy (thus interrupting the contact established with the mother). The sequence in which the mother reattempts to capture her child's attention can be repeated until, like in the situation type (a), the interaction 'subsides' by itself, or is interrupted by the researcher's intervention.

As a set of conclusions regarding the ambivalent model in the phase of free mother-child interaction, we can mention the following: *(1) the interaction sequences are short, there are many interruptions, hesitations, invitations, resuming of contact; (2) during the interaction there are brief moments when the child seems disconnected, disoriented, confused, hesitant, followed by the resumption of interaction with her mother; (3) often we noticed a mismatch between the social and psychological levels of communication; (4) ambivalent schemas may also alternate at the general level of interaction: sometimes the sequence is concluded by the contact between the two protagonists, with synchronized actions and the attainment of reciprocal attention; sometimes the attention seeking goes out by itself without reaching the point of sharing.*

Features of the interaction for the avoidant attachment style (A type)

As the sample under investigation comprised only 4 avoidant children, the degree of generalization of the schemas is low and may be used only as a rough guide. The elaboration of well-founded schemas specific to the avoidant mother-child interactions requires the study of an increased number of cases in subsequent investigations.

Besides, the low number of recordings limits our capacity to compare the amplitude of interactions between this style of attachment and those presented above.

During the free play phase, 26 significant behaviors were coded, out of which only five had a frequency higher than 5 occurrences. Unlike the insecure ambivalent attachment pattern, the avoidant one shows an increased balance between the relational space occupied by the actions of the two actors. The maximum frequency codes were 2 in number, referring both to the mother's action ('the mother prompts her child') and the child's response ('the child refuses to cooperate') .

Table 3 shows the list of codes of frequencies greater than 5 occurrences in the free play phase of the avoidant insecure attachment.

Table 3. The list of codes with a frequency higher than 5 occurrences within the free play phase of the avoidant insecure attachment

Code: M_f1_the mother prompts the child {10-0)
Code: C_f1_the child refuses to cooperate {10-0}
Code: C_f1_the child talks to the mother {9-0}
Code: M_f1_the mother asks her child questions {5-0}

The figure below (no. 3) shows the schema for the mother-child interaction in the free play phase.

In all the investigated cases, the free play sequence corresponding to the avoidant attachment style started with the mother's attempts to draw her child's attention by calling him and showing him a toy.

The defining element identified in the interaction based on avoidance is made obvious by the child's reaction: the contact maintained between the two, with a low degree of intimacy/closeness attained by focusing on an object external to the relationship, which can be the toy or the stranger. Thus sometimes the child responds by (a) approaching to take the toy from her mother, to which she apparently reacts in a playful manner (by games of the type 'I give it to you, I'm not giving it to you!'), but also by inducing a confusing note, bafflement and implicitly distance. The sequence ends with the child's physical moving away from the mother and going to the foreign person, as if the objective of receiving attention/confirmation from the attachment figure can only be reached by keeping away from her.

Circumscribed to the same operating principles as those mentioned above, an alternative response of the child to her mother's invitation is (b) the immediate focusing of her attention on the stranger. Further within the sequence, the mother speaks to the child, who carries on walking towards the stranger, the mother continues to call her, while she continues to ignore the calling, and thus keeps the mother's attention focused. As a confirmation that the model works, in the sense that it is the most effective strategy to achieve the goal of obtaining (indirectly) reciprocal attention, the mother goes to her child, interrupts the action, invites her to cooperate with her, and the child refuses her to the end.

The conclusion already mentioned with regard to the usual interaction of the avoidant model can be the following: *an effective strategy for the two protagonists to preserve relative contact and mutual attention is to move away from each other.*

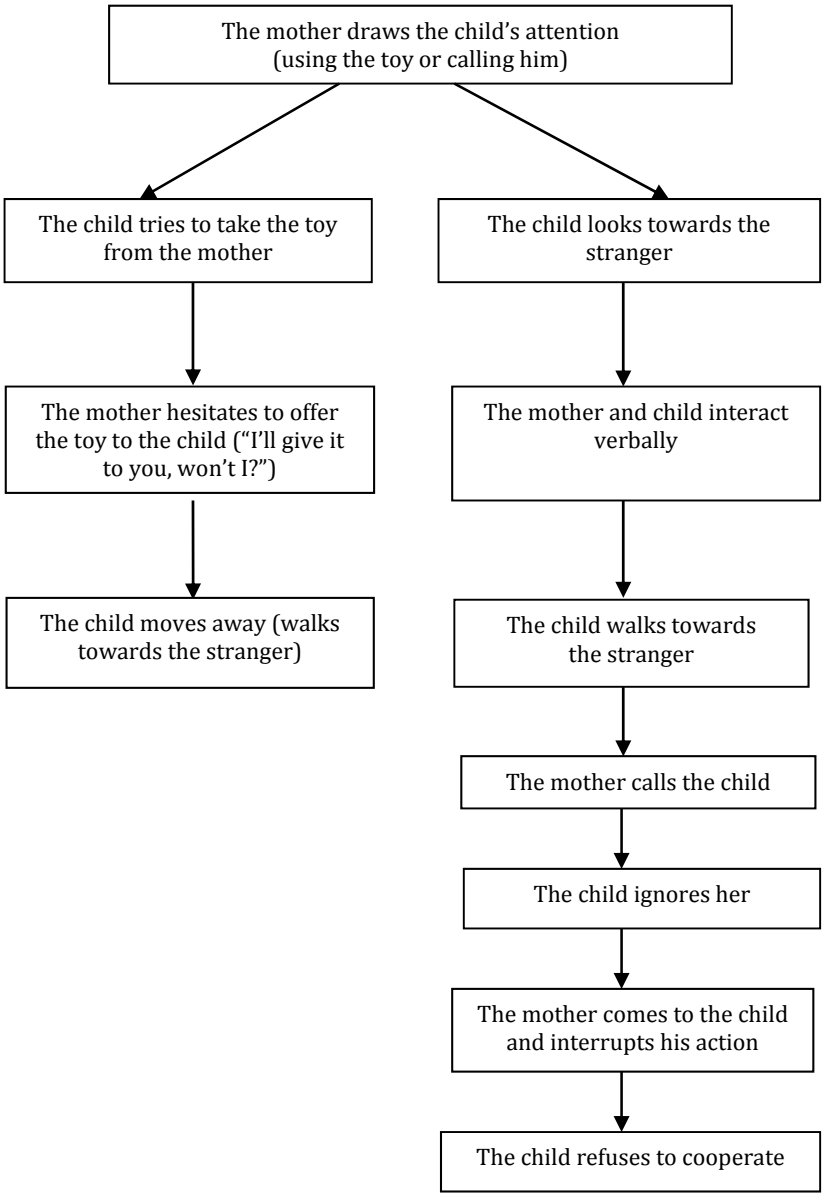

Figure 3. Mother-child interaction schema in the free play phase for the avoidant children

Features of the interaction for the disorganized attachment style (D type)

The analysis of the 4 records corresponding to the disorganized attachment style does not allow the development of a clear scheme of interaction. The lack of a coherent strategy is the basic characteristic of these children's interactions with their mothers during the free play situation, as already described in the literature (Ainsworth, 1978).

However, we will give some examples of interaction fragments to highlight some features of the interaction of children with disorganized attachment with their mothers, in the presence of a stranger.

For example, in one case, the free play interaction between the two protagonists begins in a way similar to that of the secure style, through good synchronization and relating. Nevertheless, the action continues in specifically avoidant, disconnected manner (the mother speaks with a stranger, while the little one plays, keeping the distance in order to receive any attention from her). But because the mother continues to speak and to be attentive to the stranger, the child does not receive the desired stimulation and attention, and changes abruptly her approaching strategy in a specifically ambivalent manner (cuddles in her mother's arms and hits her at the same time, thus discharging the accumulated frustration).

In a similar manner, other successive short passages follow in the interaction, that hold specific features for other styles of attachment, showing mixtures of various patterns previously described. The conclusion that can be drawn from these observations is that, like in the cases of other attachment categories, *these children seek the mother's attention, but her response is so inconsistent that they constantly struggle to change or briefly repeat all possible strategies of wining her over.*

Regarding the specific codes for the disorganized attachment, we see that, in the four films that we made, we identified a significant number of behaviors similar to those of the avoidant style. Next we present specific data only as a rough guide, given the small number of records, compared to the cases of secure and ambivalent styles, which does not allow for further inferences or generalizations.

More specifically, in the first phase of the semi-structured exercise, 30 behaviors were coded, out of which only 4 have a frequency greater than 5 occurrences (Table 4). The maximum of 8 occurrences is scored by the child behavior code, unlike in the case of the other styles of attachment and, moreover, is oriented towards the stranger, not the mother ('the child interacts, cooperates with the stranger').

Table 4. The list of codes with a frequency higher than 5 occurrences within the free play phase of the disorganized attachment

Code: C_f1_the child interacts and cooperates with the stranger (8-0)
Code: M_f1_ the mother encourages her child {6-0}
Code: MC_f1_the mother and the child cooperate in for accomplishing the task {5-0}
Code: M_f1_the mother prompts her child {5-0}

Discussions and conclusions

As it has been observed so far, this study has an obvious inductive structure. Due to the relatively small number of recordings, no conclusions with an overarching level of generality can be drawn. However, we can highlight some principles and implications thereof. We will briefly refer to a number of notable results found in the literature of the field surveyed.

In summary, we have shown that in the case of *secure attachment*, the most frequent codes refer to synchronized actions of a stimulus-response type, of the two protagonists involved, the mother and her child. Mutual trust within the interaction and enjoyment of the company represent intrinsic features of the relationship and attention, closeness and security seem to naturally derive from them. The mother seems to have a natural tendency to respond contingently to her child, is attuned to him, thus making the child feel the enjoyment of company and the eagerness to explore the environment.

Regarding the *insecure ambivalent* attachment style, we noted that, unlike the model of secure interaction, the mother's part in the interaction is more dominant and intrusive while the child's actions seem to fade and the relational space that he has is less extended. Belsky's already cited meta-analysis (1999) mentions the ambivalent insecure attachment's connection with the intrusive parenting style, which is excessively stimulating, and controls interactions. In this light, we added from our observations the unnatural way of relating, marked by micro-ruptures in the relationship (interruptions, hesitations) that are not corrected (the child seems disconnected, disoriented, confused, hesitant). The features of the interaction we observed match those described by Kirkland (2005, in Andreassen & Fletcher, 2007) for the ambivalent style: diminished in terms of sociability and independence, presenting an increased tendency to seek maternal attention, as well as distress at separation from her mother. Ambivalent schemas of interactions are also obvious in the discrepancies between the social and psychological levels of communication. Moreover, the ambivalent schemas alternate at the general level of the interaction: sometimes the sequence is concluded by the contact

between the two protagonists, with synchronized actions and the achievement of mutual attention; some other times it dies out by itself without achieving shared attention.

Regarding the *avoidant insecure* attachment style, unlike the case of ambivalent attachment, we observed an increased balance in the relational space between the actions of the two actors. In the free play phase the two protagonists maintain contact, but a low degree of intimacy and closeness is attained by focusing on an external object (the toy or the stranger) and does not rely on features within the relationship. In other words, an effective strategy for the two actors to preserve relative contact and mutual attention is to move away from each other. Ainsworth (1978) characterizes these children as exploring immediately, showing little affection or securing behavior, and answering minimally or showing very little distress when left alone. Moreover, they actively avoid the parent, looking elsewhere and often focusing on toys, while seeking distance, and being more interested in toys than in the parent.

Regarding the *disorganized attachment* style, the lack of a coherent strategy is the basic characteristic of these children's interaction with their mothers. These children alternate strategies specific to the secure, ambivalent and avoidant attachment styles, which is consistent with the observation of Main (2000, in Andreassen & Fletcher, 2007) who described these children as acting in a disoriented and confused manner in the presence of the parent, either by making attempts to please, or showing anger and rejection towards the parent. The conclusion that can be drawn from our observations is that, like the other types of attachment, these children seek their mothers' attention, but the latter's response is so inconsistent that the children try to either change or shortly repeat all possible strategies to establish a connection with her.

The present investigation analyzed detailed patterns of interaction between mother and toddler in a non-stressful situation (free play), in the natural environment of the dyad. Such an approach is useful for a practical reason: the schemas of interaction derived represent a basis to diagnose the model of interaction between parent and child in a non-intrusive manner. Furthermore, by having the secure model schema as an example of interaction, the parent can optimize his own relational patterns or may ask for professional support where they encounter difficulties in implementing a change. Moreover, for the professionals, the patterns we described can help in further operationalizing the specific behavioral patterns of interaction between mother and child in each of the insecure attachment styles and design interventions to change these patterns towards those specific to secure attachment. By analyzing both mother actions and child behaviors, our contribution to extant research in the field of attachment relationships is the enrichment of the description of attachment styles in terms of specific behaviors of the child, parallel to those of the mother.

Limitations of the study

Though the paper brings a novel and interesting methodological approach for the appraisal of attachment in mother-child dyads, several limitations are worth being mentioned. The main limitation resides in the method of classification of children's attachment styles by using the assessment of only one rater and not establishing interrater reliability. Also, the small number of video recording gathered for avoidant and disorganized attachment styles precludes us from generalizing the conclusions.

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WHAT MOTIVATES SECONDARY SCHOOL LEARNERS TO STUDY?

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ABSTRACT. School performance is determined not only by the learners' cognitive abilities, but also by several other factors, including learner motivation, which provides the necessary energy for learning (Oroszlány, 1994). Experience has proved that learners equipped with very good learning abilities do not achieve their best possible results, while learners with weaker cognitive abilities but more diligence work hard and do better at school. The phenomenon can be explained with the degree and form of motivation for learning, which, if taken into account and developed, can become a tool for fostering achievement. The research tries to find out the characteristics of grammar and high school learners' motivation, using written surveying methods (Kozéki & Entwistle, 1986), and examines whether there are any typical differences based on age group and gender. The questionnaire analyses learner characteristics along three dimensions: social-affective, cognitive-behavioral and moral-integrative. Based on the research findings, recommendations can be made on how to motivate learners effectively, which teachers of different age groups could use.

Key words: *learner motivation at school, learning achievement, secondary school education, the fields of motivation at school (affective motives, cognitive motives, self-control motives)*

ZUSAMMENFASUNG. Die Schulleistung wird nicht nur durch die kognitiven Fähigkeiten der Schüler bestimmt, sondern wird auch von anderen Faktoren beeinflusst, unter anderem die Motivation der Schüler, die die nötige Energie für das Lernen garantiert (Oroszlány, 1994). Die Erfahrungen bestätigen oft, dass leistungsstarke Schüler oft weniger leisten als erwartet, beziehungsweise lernschwache Kinder durch harte Arbeit und Fleiß in der Schule sehr gute Ergenisse erreichen. Das Phänomen lässt sich durch das Maß der Schulmotivation und Schulform erklären, durch deren Stärkung und Berücksichtigung der Schulerfolg der Schüler beinflusst werden kann. Die Recherche (Forschung) unternimmt, daß

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man durch schulische Befragung (das Instrument Kozeki-Entwistle Motivations-Fragebogen) die Eigenheiten der Schulmotivation der Schüler aus den 5-12 Klassen aufdeckt, ob es typische Unterschiede nach Alter und Geschlecht gibt. Das Fragebogen ergrifft auf drei Dimensionen (affektiv-sozial, kognitiv-aktiv, moral-integrativ) die Eigenheiten der Motivation jedes einzelnen Schülers. Aufgrund der Forschungsergebnisse können wir für die Lehrkräfte, die sich mit verschiedenen Altersgruppen beschäftigen, Empfehlungen betreffs der effizienten Motivation der Schüler formulieren.

Schlüsselbegriffe: *schulische Motivation, Lernerfolg, Oberschulbildung, die Bereiche der schulischen Motivation (affektive Szene, kognitive Szene, Selbstkontrolle - Szene)*

1. Introduction

School performance is determined not only by the learners' cognitive abilities, but also by several other factors, including learner motivation, which provides the necessary energy for learning (Oroszlány, 1994). Experience has proved that learners equipped with very good learning abilities do not achieve their best possible results, (Ziellmann, 2002), while learners with weaker cognitive abilities but more diligence work hard and do better at school. One possible explanation of the phenomenon could be the degree and form of motivation for learning, which, if taken into account and developed, can become a tool for fostering achievement at school. (Báthory, 2000).

In the present paper we are looking at secondary-school (year 5-8) and high-school (year 9-12) students' motivation for learning, as by finding out more about its characteristics we could reconsider and further develop the ways and means of motivating children for learning and we would be able to formulate suggestions to teachers and parents on more effective ways of motivation.

According to an outstanding representative of the research of motivation, Kozéki Béla (1980), motivation is an inner tension that triggers action, either to avoid something unpleasant or to achieve something desirable. Owing to motivation, certain actions can make use of a lot of energy to be carried out while others cannot.

The original meaning of the word motivation supports the above mentioned, as the Latin word 'movere' means moving. (Estefánné Varga M. et al) While in action motivation has four phases according to Nagy József (2000) in the first phase we perceive the changes of the inner and outer environment, with a

view to the second phase, in which we decide upon being interested in a situation. (eg. if one needs to relax because they are very tired, they will go to sleep while watching their favourite programme.) The third phase consists in signalling the decision of being interested, and the fourth is the drive to carry out an action. Motivation consists of several motives, among which we can distinguish primary ones, urges characteristic to both animals and humans (needs, homeostatic urges, drives, feelings, desires), as well as higher order motives, which are only characteristic to humans (intentions, wills, competence motives and performance motivations) (Balogh, 2006, p. 19-22).

Maslow presents in the form of a pyramid the hierarchy of needs, which foster certain behaviour in people, and determine their trains of actions. Starting at the base of the pyramid he enumerates the following needs: physiological needs (hunger, thirst, etc.), security needs (feeling secure, far from danger), need for love (belonging to a group, being accepted), need to feel esteem (being competent, achieving your goals, being appreciated by others), cognitive needs, (need to know, understand, comprehend), aesthetic needs (need for symmetry, order, beauty), need for fulfilment (achieve fulfilment, seize opportunities) (Atkinson et al, 1995, p. 402). The hierarchy is based on the assumption that certain needs must be taken care of before others, thus Maslow presumes that one tends to cater for basic human needs, those related to life support, first, before higher order ones, those on top of the pyramid: cognitive, aesthetic and self- esteem. Nevertheless, Maslow's views can be easily disproved as one can see that our curiosity or need for fulfilment can get ahead of the primary, life supporting needs.

Murray classifies 27 needs into six groups, providing us with one of the most exquisite motivation systems. The six groups comprise: ambition (achievement motivation), clinging to objects (possession), protecting status, power (dominance), relationships, exchanging information (cognition). (Estefánné Varga et al)

Starting from the present day reality in pedagogy, the question arises as to what motivates children to learn, what are the motives that drive them to acquire knowledge, to achieve school performance, how to model a stable learning motivation pattern that define learner personality in the long run?

Tóth László divides motives in three groups that particularly influence learning at school. The first group connects to learners' need for self-esteem and includes sustenance and growth of self-confidence. Anxiety and motivation to achieve belong to this group. The second group of motives is that of curiosity, which stems from the need for cognition and comprehension and stands at the basis of research and discovery. The third group is that of social motives, which aims at the realisation of affectively fulfilling interpersonal relationships. (Tóth)

Learning performance is greatly influenced by self-image and self-esteem. Self-image is modelled by feedback from the environment, as compared to the expectations set by ourselves, as well as our social environment (teachers, parents, peers), to the degree in which they all accept us. During school work self-esteem is mostly modelled by anxiety and motivation to achieve. Anxiety can be a demotivating factor that can prevent the learners from performing as well as their abilities would allow. Anxiety is closely related to motivation to achieve, which can be found in the striving for success, as well as in trying to avoid failure. If a task causes anxiety in a learner, that usually leads him to trying to avoid failure. The more failure children experience at school, the less self-confident they will be, the less self-esteem they will possess, the less they will value themselves, and soon, their behaviour will change accordingly. Strong level of anxiety can even lead to children hating school. Nevertheless, children's anxiety levels may change, consequently, teachers must take that into account and interfere accordingly, lowering the level of excitement of those in a high anxiety state, while, sometimes raising the excitement level of those less anxious.

Motivation for learning is highly influenced by the positive and negative emotions felt during the process. It is well known that positive feelings reduce the level of anxiety in children, so they could focus on the learning task more at ease. Csíkszentmihályi (1997, in N. Kollár & Szabó, 2004, p. 188) suggests that the best time for learning is in the state of flow, of total relief, without any distress, when the child is enchanted by the thrill of executing a task. However, that would not happen unless the degree of difficulty of the task correlates with the level of cognitive development of the learner, as a too easy task would be boring, while a too difficult one would lead to anxiety. Negative feelings augment anxiety, which past a certain level could be debilitating, so that the learners would underachieve as compared to their abilities. As a result, it is important to mention the importance of developing the right level of motivation for learning to be efficient. The way we approach a given learning task is an individual characteristic. Motivation for learning fosters progress until the reach of an optimal state, but past that state, it will get in the way. In case children consider, based on their preliminary experiences and memories, that they would be able to execute the task, they will strive for success, feel able to succeed, thus will solve problems easily with just a small input of energy, which will ensure further sense of achievement. In case children had experienced more feelings of failure, the causes of which they attributed to themselves, they will try to avoid failure and will make use of more energy input for learning, the outcome of which will not always be a sense of achievement.

The task of the teacher is to provide the children with as many experiences aimed at feeling a sense of achievement, which can be realized by changing the individual tasks and requirement levels on the one hand, while, on the other hand, by changing the children's ways of thinking, from a pursuit of avoiding failure towards setting up a sense of achievement behaviour pattern.

The second group of motives refers to curiosity and the need to acquire and understand knowledge. Humans possess an inherent tendency to explore, a need to discover their environment. That need, however, similarly to the level of anxiety, varies with every individual. Thus, in a class, too, we can observe that some learners are more exploring, curious and inquisitive than others. During the learning process at school we should try to arouse curiosity, pose realistic problem situations, as tackling those problems could be intriguing in itself for the learners.

In the case of motivation for learning we can distinguish intrinsic motivation (self-rewarding motivation), that appears in the form of curiosity, interest and quest for knowledge motivated by the joy of carrying out a task, as well as, in case the intrinsic motivation doesn't happen, either owing to the subject matter studied, or because of the existence in parallel of other needs, intention will step in, that is willpower, which can be enforced with the help of other means of extrinsic motivation, various forms of rewarding and punishment. (Báthory & Falus, 1997, p. 491). While managing learning learners who are internally motivated should not be rewarded with external means, as by combining the two types of motivation the same task that the learner fulfilled for the joy of performing it will later be carried out only in expectation of some external reward. Vallerand (2004) distinguishes between three types of intrinsic motivation: (1) motivation to know, acting for the joy of learning, for acquiring knowledge, (2) motivation to develop and create, based on the desire to create, to surpass ourselves, (3) motivation to feel stimulated and live through experiences, when one is looking for pleasure.

The third big group of motives consists of the motives of social acceptance, the need of the individual for acceptance by the peers, esteem, attention, recognition, care. Younger learners tend to crave for the recognition, acceptance, praise of the teacher, the recognition from peers is not yet a strong motivator. Older learners, on the other hand, tend to be motivated by the competition among peers, to achieve the best social status, and as a consequence learners seek more peer acceptance than teacher recognition. Thus cultivating teacher-learner relationship and creating a safe affective environment in the classroom becomes very important.

Children who are asked whether they like learning, finding out about new things, or whether they like going to school, might not give similar answers.

It might happen that the children would want to gather more knowledge about the world but are not able to or don't want to meet the school requirements all the time, which will also affect their motivation for learning. That realisation was, in the last century, at the origin of the researches of motivation at school, as well as of those factors that affect motivation at school, which scholars consider of a larger scale than the concept of motivation for learning. While analysing the concept of motivation at school we base our assumptions on Kozéki (1990), who defines it briefly as the motivation to meet school requirements

Kozéki Béla (1990) considers that environmental factors play an important role in the development of motivation at school, as they will affect the development of children's character through the different means of reinforcement. The chart below presents his system of motivation styles that children develop alongside social environment and motive types, thus pointing out the great importance of parents, educators and peers in the development of motivation at school in children, incidentally that of motivation for learning, and that motivation is also influenced by affective and cognitive experiences, as well as the belief system of children.

Table 1. The fields of motivation at school (Kozéki, 1990, p. 102)

Motives / Environment	**Affective – personal relationships**	**Cognitive – Physical environment**	**Self-control – own value system**
Parents	Friendliness/ warmth	Independence / Pursuit of own way	Self-esteem and confidence / Conscience
Educators	Identification	Competence / Acquiring knowledge	Meeting requirements / Imitating values
Peers	Sociability	Interest / Shared activity	Responsibility

Based on the two dimensions nine motives are distinguished, which, in different combinations, structures, result in different motivation styles.

1. Friendliness/warmth – children can be motivated to learn by having a good relationship with their parents, as they would want to make them happy getting good results at school.
2. Identification – good relationship with the educators can also be a motivating factor, children strive to meet the educators' requirements, then build those requirements into their own personality, pursuing them as personal goals.

3. Sociability – a good relationship with peers also motivates as children want to be liked by their peers, accepted by their communities, which can be motivating on condition that the community appreciates their attitude.
4. Independence – the wish to discover the world. Children who are independent tend to be motivated by their success to get by on their own in the world. They can become perfect through learning.
5. Competence – the wish for knowledge can be motivating. Knowledge, skills and abilities acquired at school develop competence, which urges children to learn.
6. Interest – pleasure of acting, taking part in interesting activities motivates children.
7. Self-esteem – other people's appreciation develops self-esteem or the lack of it in children that can motivate them to make an effort.
8. Meeting requirements – the need to meet standards, which pervades in a feeling of duty.
9. Responsibility – acceptance of and behaviour in accordance with social norms, assuming responsibility for own behaviour. Children feel pleased to behave responsibly and meet requirements (Kozéki, 1990, p. 104).

The presented system helps understand the myriad of motives that motivate children to learn and to go to school. Recognising the role of parents, educators and peers in the development of motivation, we are able to make further considerations of the educational means that are able to shape those motives and could be used to boost the learning achievement in children.

In the next part of the paper we are looking at the motivation at school of the pupils of one school based on the nine dimensions presented above. Following, we will analyse the motivation status of schoolchildren of a particular school based on the nine enumerated dimensions and the additional tenth that of the feeling of educators' pressure.

2. Research Design

2.1. The aim of the research

It is widely accepted and research data supports (N. Kollár & Szabó, 2004) the fact that the older children become, the less they like going to school, they are not enjoying themselves and are less motivated to learn. Obviously, at the basis of the phenomenon there is a wide range of causes that cannot be

presented in our paper exhaustively. Nevertheless, we are trying to find those motives that are the most responsible for influencing children's activities at school, as well as their attitudes to school activities. We are also trying to find those aspects of their social environment that would most affect their learning achievement. Analysing those problem questions has practical usefulness as well, as learning about the motivation of pupils of one the school in the study, enables us to formulate suggestions to the teachers, as well as to the parents of those children, with regard to the possibilities they have in helping to shape and improve motivation in their pupils or children.

2.2. Research hypothesis

Following previous research in the field (Kozéki – Entwistle, 1986; Csibi, 2006; Gömöry, 2006; Liptákné Czakó, 2006; Peltekianné Cseke, 2008), as well as considering empirical data, the following *hypotheses* were formulated at the beginning of the research:

- Learners are mostly motivated by the need to meet their parents' expectations
- Learners are the least motivated by the feeling of pressure imposed by teachers on pupils at school
- Importance of motives varies with the age group in which learners belong:
  - In years 6 – 7 at school the motive of belonging to the peer group becomes more important
  - In years 8 and 12, responsibility grows, as both age groups are on the verge of serious examination sessions, entrance examination into year 9, A-level /baccalaureate exams.
- Gender influences learner motivation
  - Girls are motivated more by affective motives
  - Boys are motivated more by cognitive factors at school

2.3. Research tools

The *research type* was *diagnostic,* surveying the pupils in years 5-12 of a school in Satu Mare, Romania with the help of a questionnaire designed by Kozéki – Entwistle, for finding out motivation at school (1986). The questionnaire was added demographic questions to help further analyses, as well as questions about favourite and least favourite subjects at school. The questionnaire on motivation consists of 60 statements that provide the means

to identify the 9 motives presented in the theoretical background (each motive is examined along 6 questions to identify their intensity). We have also added a 10th motive, the feeling of pressure imposed by the teachers. Pupils were asked to mark on a scale from 1 to 5 the degree in which they agree with the statements. In order to process the data, mathematical and statistical methods were used (calculations of mean, frequency and correlation) with the help of the computer programme SPSS.

2.4. The sample of participants

The survey was done during November 2013, with the assistance of the school's education counsellor and its teachers. During the survey pupils from years 5, 7, 8, as well as two classes of year 10 and one each of years 11 and 12 of study were asked to fill in the questionnaires. That meant a total number of 177 respondents, out of which 96 are boys and 81 are girls (see Table 2).

Table 2. The survey group according to gender and age

Gender / Year	Boys	Girls	Total
5	18	11	29
7	19	13	32
8	13	13	26
10	21	20	41
11	12	13	25
12	13	11	24
Total	96	81	177

Owing to the fact that motivation at school is basically determined by the attitudes of the children's parents towards school, we consider it important to present the variation of the survey group according to the parents' qualifications as well. Figure 1 shows that half of the parents of the surveyed group have a university or college degree, one third have A-level diplomas, 17% finished technical schools, only few left school after the first eight years and a few have a PhD degree. If we are looking at the differences in schooling as compared to the gender of the parents, we can see that those are not significant, though a slightly higher percentage of the mothers graduated university than that of the fathers and more of the fathers finished a technical school (differences of 5.5% and 6.4% being insignificant).

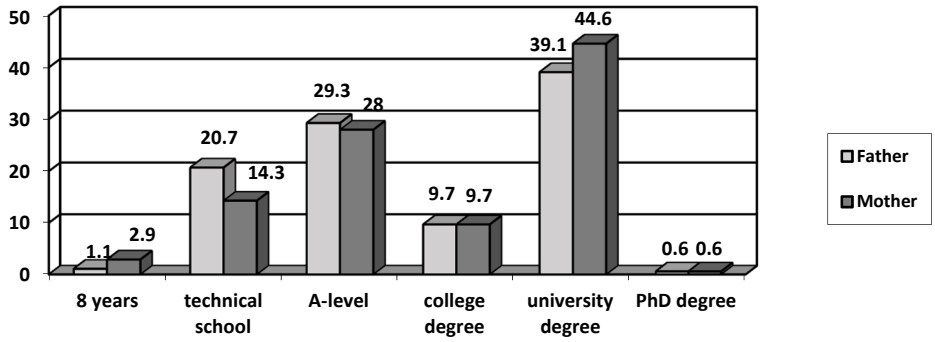

Figure 1. The survey group according to gender and parents' qualifications

2.5. Presentation and evaluation of data

During data processing it became clear that from among social relationships it is the parents and the peers who mostly influence the learners' motivation at school, followed by the influence of the teachers' on the children's system of values. As far as the personality traits are concerned, affective factors and moral values motivate learners most, while cognitive factors seem to motivate them less (see Table 3).

Table 3. Ranking of motivation factors according to total and gender

Motives	Total (rank)	Boys (rank/points)	Girls (rank/points)
Parental affection (Pa - aff)	**1** / 23.71	1 / 23.82	**2 / 23.59**
Conscience (Pa - val)	**2** / 23.44	2 / 22.86	**1 / 24.13**
Responsibility (PG – val)	**3** / 22.55	**4 / 21.74**	3 / 23.51
Peer group adherence (PG- aff)	4 / 22.21	3 / 22.12	4 / 22.32
Following values (E – val)	5 / 21.32	**6 / 20.5**	5 / 22.29
Need for independence (Pa – cog)	6 / 20.53	5 / 20.59	6 / 20.47
Need for acquiring knowledge (E – cog)	7 / 19.52	8 / 18.99	7 / 20.24
Collaboration (PG – cog)	8 / 19.47	7 / 19.28	8 / 19.73
Parental acceptance (E-aff)	**9** / 18.23	9 / 17.79	9 / 18.76
Feeling of pressure	**10** / 17.11	10 / 16.66	10 / 17.47

(Abbreviations: Pa-parent, E-educator, PG-peer group, aff – affective, cog – cognitive, val – values system)

Cognitive factors rank on positions 6-8 at this school, which allows us to draw the conclusion that affective, conviction factors have a stronger influence on school motivation of learners than their need for acquiring knowledge. It can be interesting to notice, while evaluating the overall data, that the motives ranking on the last two positions in our table that least influence learners' motivation at school are acceptance by teachers and the feeling of pressure they put on the learners. While comparing our data with other similar researches (Balogh, 2006, p. 211), we may conclude that the motives of warmth/ friendliness (parental affection), which stands on top of the list, as well as that of pressure (high standards of requirement that put strong pressure on learners) ranked on the same positions in other studies with a different surveyed group. Nevertheless, there are differences in ranking of the cognitive motives: while in the case of the afore-mentioned study, educators rank higher, in the present study the cognitive motives induced by the parents play a more important role in the development of motivation at school.

While looking at ranking of motivation factors and gender, we can see that there are no significant variations in the motivation of girls and boys. Moreover, the motives of acceptance by teachers and feeling of pressure rank on positions 9 and 10 in both cases. The other factors swap places in pairs: girls are mostly motivated to learn by conscience and duty, while with boys their parents' affection and acceptance by peers is slightly more important. Another conclusion is that girls are more influenced by the status quo of the value system than boys (nevertheless, that is a basic motivation factor in the case of boys, as well), and that cognitive motives rank higher with boys (position 5 as compared to position 6 with girls) (see Table 3).

Let us now look at the calculated means along different dimensions for the two genders. Based on the areas of personality we differentiate between follower (affective motives), enquirer (cognitive motives) and productive (moral values) motivational dimensions.

Table 4. Variation of motivational dimensions with gender

Motivational dimensions	**Mean values**		
	Boys	***Girls***	***Total***
Follower	63.73	64.67	64.15
Enquirer	58.86	60.44	59.52
Productive	65.1	69.93	67.31

Table 4 shows that girls produced higher motivational values than boys in all the three dimensions, which can lead us to the probability of stronger motivation at school in girls than in boys. The most significant variation with gender is in the case of the moral values. Moreover, in the case of the girls, conscience also ranks first. Although we presumed that in case of the boys cognitive motives prevail in motivation at school, our results show that cognitive motives have the least influence on boys' motivation. Furthermore, their mean is lower than that of the girls'. The slightest variation with gender is found in the case of affective, follower dimension, which, set against the values received in the ranking, leads us to conclude that it is the most influential motivational dimension with boys, especially as far as their relationship with their parents and peers are concerned, while their relationship with teachers interests them less.

Let us now turn to the correlation between motives and school years. In the *follower* motive group the role of the affective factors varies with age as seen in Figure 2, which shows how acceptance by parents, teachers and peers motivate students to learn. Acceptance by peers seems to be consistently important in the case of all years of study, the variations being minimal. On the other hand, the role of parents' acceptance and affection, is decreasing with the children becoming older, their peak value being reached in years 7 and 8 at school. That result may probably be partly explained by the particularities of being a teenager, as teenagers tend to turn against their parents' authority, while, at the same time, it is usually important for them not to lose their parents' affection and their safe family background. Relationship with teachers tends to go along with the relationship with parents, though it becomes less and less important for the secondary school students' to be accepted by their teachers and in year 8 at school that factor has the highest value. Nevertheless, the lowest mean for this motive can be found in year 7 at school. Secondary school students in year 7 seem to value meeting teachers' requirements and having an affective relationship with them the least.

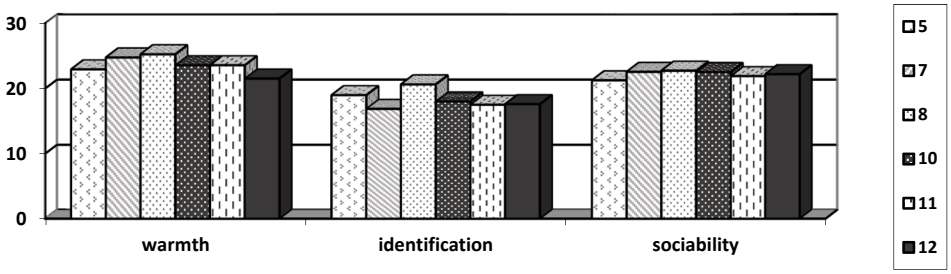

Figure 2. The follower motivational dimension according to school year

The values for the *enquirer* motive group can be followed in Figure 3. It can be noticed that the means for the students in year 7 are mainly lower than those of the other years, cognitive motives do not motivate them as much to learn. As expected, independence, the need to follow one's own way becomes more and more important with students becoming older and older. Nevertheless, the need to acquire knowledge (competence) shows variation with the years of study. Interest, as motivating factor has the highest importance in years 8 and 12 of study, probably owing to the forthcoming national testing requirements, the high-school entrance examination and the A-level examination sessions.

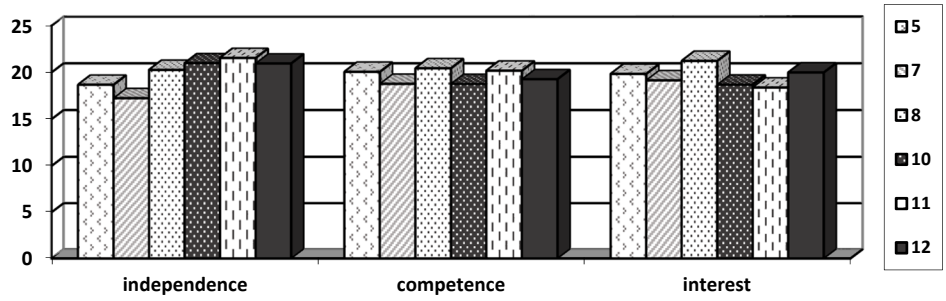

Figure 3. The enquirer motivational dimension according to school year

Lastly, the mean values for the third motive group, the *productive* motivational dimension are presented in Figure 4. The data leads us to the conclusion that conscience and responsibility become more and more involved in motivating students as they are becoming older. This reflects the strength of their moral values, as learning appears as a value in the students' lives. There are no significant variations of the school requirements factor with the year of study. Nevertheless, in this dimension it ranks lower as compared to the other two motives. It may be worth pointing out that the mean value for year 7 of study is the lowest for this motive from among all years of study, while the mean value of the other years is basically similar to the values of the other two.

Following to the presentation of the mean values let us now look at the rank of the motivational factors according to school years.

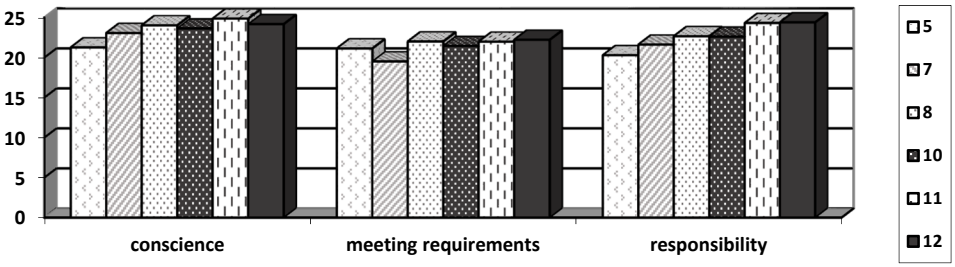

Figure 4. The productive motivational dimension according to school year

Figure 5 clearly shows that cognitive motivational factors can be found all in the second half of the list, in the case of affective factors, acceptance by teachers becomes less important than acceptance by parents and peers, while, moral values prevail in the first half of the list. Pressure is ranked at the bottom of the list, though following each school year separately, it can be noticed that students in year 7 rank this motive 8th and those in year 12 rank it 9th.

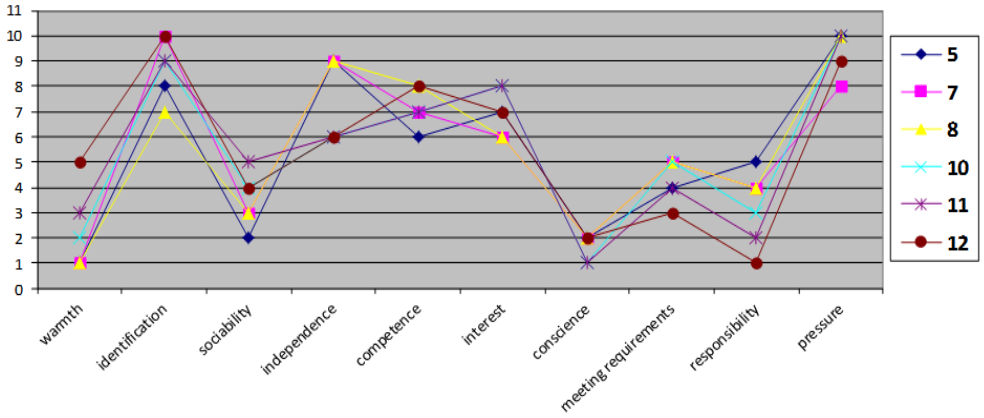

Figure 5. Rank of motivational factors according to school year

Moral values gain importance as students are becoming older. While in secondary school (years 5, 7, 8) parents' acceptance is a basic motivation factor, in high-school, moral values come forth, in years 10 and 11 conscience, and in year 12 responsibility seem to motivate students most to learn. In parallel, we can witness the weakening of affective motives in influencing motivation at school. While in secondary-school warmth, acceptance by parents is the most

motivating factor, in high-school, as students are becoming older, the same motive is becoming less and less influential for learning (it ranks 5th in year 12 of study). In the same way we can witness the weakening of the influence of acceptance by teachers and peers, identification ranking 10th with students in year 12, while relationship with peers remaining in the middle section, nevertheless, moving down from ranks 2, 3, to 4 and 5.

Cognitive motives swap ranks among themselves, occupying higher ranks as compared to each other in turns (on positions 6, 7 and 8): while it is interest in secondary-school, in high-school it is the need to follow one's own way that motivates learners more (see Table 5).

Table 5. Ranking of motives according to school years

Motives/Years	5	7	8	10	11	12	Total
Warmth	***1***	***1***	***1***	***2***	***3***	***5***	1
Identification	8	10	7	9	9	10	9
Sociability	2	3	3	4	5	4	4
Independence	9	9	9	6	6	6	6
Competence	5	7	8	7	7	8	7
Interest	7	6	6	8	8	7	8
Conscience	2	2	2	1	1	2	2
Meeting requirements	4	5	5	5	4	3	5
Responsibility	***6***	***4***	***4***	***3***	***2***	***1***	3
Pressure	10	8	10	10	10	9	10

The previously presented considerations are supported by the way motive groups change in time. Table 6 presents that follower (affective) motive group in years 7 and 8 is on the highest rank, enquirer motive group in year 7 is on the lowest rank, while the productive (based on moral values) motive group is becoming a stronger and stronger motivating factor with age.

That may probably be a consequence of the educational effect on students as well.

Table 6. The values of motive groups in each school year

	5	7	8	10	11	12	Total
Follower	63.22	64.24	68.65	64.06	63.01	61.37	64.15
Enquirer	58.64	55.22	62	58.49	60.16	60.27	59.52
Productive	62.71	64.21	68.71	67.72	71.17	70.8	67.31

3. Conclusions and recommendations

The hypotheses of the research have only partly been proved. It has been proved that parents influence motivation at school greatly, mainly affectively, as well as by building up the moral value system of which the school and learning must be part. However, we must point out that with age the affective motive loses importance and conscience and responsibility take over the lead. That is why school and parents working together, the supporting presence of parents, becomes utterly important in building up and sustaining motivation at school. Even though on a superficial survey it might seem that teenage students look forward to becoming independent, the reality is that they still need the supporting background and emotional safety that their parents can still provide.

The pressure that teachers put on students with overwhelming requirements does not foster learning. An exceptional case might be that of students in year 7, as in their case, that motive seems to be slightly more important than in the case of students in other years of study. Consequently, it is not advisable to overuse that motive and others, more effective ones should be considered.

As a result of our research we can state that age is responsible for the way motives change in being effective, which leads to the idea that motivation styles should vary with school years. It has been proved that emotional acceptance is specifically important to secondary-school pupils, which parents should be made aware of. Moreover, a feeling of membership of a community and positive reinforcement should be built up in classes, as acceptance by parents and peers has proved to be an important motivating factor for this age group. In the case of cognitive motives we have seen that interest is basic with secondary-school pupils, while with high-school students more freedom should be allowed, more opportunity for personal opinion forming should be created. The fact that cognitive motives have proved less effective in our study may suggest that they should be given more concern to be strengthened. The influence on motivation of moral values (conscience, meeting requirements and responsibility) has also proved to increase with age: while the motivational effect of conscience ranks first and second, meeting requirements ranks fourth and fifth, responsibility moves up from rank 5 to rank 1 from year 5 to year 12 of study.

It has only been partially proved that approaching examinations contribute to the rising feeling of responsibility in students, which has been proved to be influenced more by age instead. Examination has proved a forceful motivating factor in year 12, ranking first, but only partially so in year 8, ranking fourth.

With pupils in year 7 at school peers have an important motivating role, indeed, though not more important than in the case of all other years. A more important variation can be noticed in the case of the pupils' relationships with their teachers, as their affective acceptance by teachers is ranked last place and is preceded by the feeling of pressure as a motivating factor two ranks ahead.

There are slight variations with regard to gender and our hypotheses have not been proved. Contrary to our expectation, both boys and girls are mainly motivated by moral values, with a slightly higher value for the girls. With boys affective acceptance is also an important factor as shown in the figures, acceptance by parents motivating them most for learning. Although the cognitive motives rank higher with boys than with girls, the variation is not significant and, the study of the motive groups shows that the mean values of this dimension are higher with girls than with boys, as it is the case with all other motivational dimensions. That may lead us to conclude that girls seem to be more motivated at school than boys, thus motivating boys for learning should be given more attention.

Following the presented data we may conclude that the level of motives that determine school motivation does not decrease with age, while from among the motive groups, cognitive motives become less important than affective and moral ones. While the follower motive group shows a weakening tendency with secondary-school pupils as compared to high-school students, the productive motive group becomes ever stronger.

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DESIGNING THE ASSESSMENT FOR A COMPETENCE – BASED CURRICULUM. A CONCEPTUAL FRAMEWORK

DANIEL ANDRONACHE[1]

ABSTRACT. The article presents a synthesis and an analysis of the literature aiming to create conceptual framework for the assessment of the competence based-curriculum. Contemporary orientations in education promote the necessity and the importance of the competences development through an adequate curriculum design. In this context the curriculum assessment becomes extremely important because its role is to provide information about the effectiveness and functionality of the education process and of the education system, as a whole, in order to improve it. In this study we aim to define and describe the processuality implied by the assessment of a competence-based curriculum, analysing the levels and the stages that are involved.

Keywords: *competence, curriculum design, assessment*

ZUSAMMENFASUNG. Der Artikel stellt eine Zusammenfassung und eine Literaturanalyse vor und zielt einen begrifflichen Rahmen zu schaffen, der relevant für die Beurteilung des Kompetenzen–zentriet Curriculums ist. Die zeitgenössische Leitlinien in Bildung fördern die Notwendigkeit und die Bedeutung der Ausbildung den Kompetenzen bei Schülern durch eine geeignete Gestaltung des Curriculums. In diesem Kontext wird die curriculare Beurteilung extrem wichtig, weil ihre Rolle Informationen über die Effektivität und Funktionalität des Bildungsprozesses und des Bildungssystems als Ganzes im Hinblick auf seiner Verbesserung anzubieten ist. In dieser Studie haben wir vor die Prozessualität der Beurteilung des Kompetenzen–zentriet Curriculums zu definieren und zu konturieren. Wir analysieren auch die Ebenen und die Stufen, die dieses Curriculum betrifft.

Schlüsselwörter: *Kompetenz, Curriculumgestaltung, Bewertung*

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1. Introduction. Some consideration about competence and competence-based curriculum

In the specialized literature there are a variety of definitions and approaches of the concept of competence, each of them trying to emphasize its importance and its necessity for the professional and personal development of the students.

According to Webster's Online Dictionary, the concept of competence was firstly used in English literature before 1590. But according to Barrett & Depinet (1991), the human resources work of David McClelland, since 1973, "Testing for Competence Rather than for Intelligence" can be considered the reference point in the rise of this concept. In this paper the author argues that assessing the intelligence level and the personality assessment can not be considered sufficient predictors of the performance, so the competence assessment can be a good and a reliable alternative. So it seems that the concept of competence in education emerged from the first acceptances related to human resource field as a possible response to satisfy the requirements of socio-economic environment. Therefore, although the concept of competence is increasingly used nowadays in the literature, and also in educational practice, there is not an unanimously accepted perspective to define it.

Just because we can not appreciate that a perspective or another is wrong or incomplete, Stoof et al (2002), considered that the absolutization of a definition belongs of a objectivist paradigm, meaning that the objectivists are those who believe that in all fields there is an irrefutable truth, an absolutely truth. So, Stoof et al (2002) claims that *a consensus and a single definition of the competence concept is impossible*. Therefore, the optimal approach to defining the concept of competence is *the constructivist approach*. From the perspective of this approach *the definition itself is not important but the issue is whether that definition has proved adequate and reliable in the context in which it was used*. Therefore, considering Stoof's approach and the most convergent approaches of the concept of competence (Parry, 1996; Mirabile, 1997; Jeris & Johnson, 2004; Dooley et al., 2004; Bocoș, 2008; Potolea & Toma, 2010, Andronache, 2014), in the educational context it can be considered adequate and reliable the approach that defines the *competence as a set of knowledge, skills and attitudes that interact in a systemic way and ensures constant and efficient performance of the various tasks required by the characteristics of the educational process* (Andronache, 2014).

Starting from the concept of competence, current educational theory and practice began to enforce more strongly the deigning of a curriculum that is focused on competences development. Seen as a whole, a competence-based

curriculum aims to train the students through a coherent and functional integration of knowledge, skills and attitudes, so its main purpose is that students do not passively acquire information. Therefore, the competence-based curriculum promotes the active learning in order that the students develop their motivation for learning and meet social demands by developing specific competences, not only professional competences but also transversal competences such as communication, problem solving, critical and creative thinking etc. (Teichler, 1998; Bennet, Dunne & Caree, 1999; Korthagen, 2004).

By making a complex synthesis of the specialized literature, Kouwenhoven (2010), identifies the main characteristics of a competence-based curriculum: *it is geared towards professional practice, promotes student-centred learning, has in its centre the learning process, has a constructivist approach, promotes the creation of learning situations focused on competences development, is implicitly focused on developing transversal competences*. Other synthesis emphasize theories apparently different but basically converging, which together contribute substantially to the scientific rationale of the competence-based curriculum. In this respect we refer to *the learning outcomes-based approaches, standards-based approaches and student-centred learning approaches* (Andronache, 2014). The obvious convergence of all these curricular approaches is their firm opposition to the content-based curriculum and therefore to the curricular models in which the student is passive, and only accumulate information. The analysis of the literature may lead to the conclusion that the competence-based curriculum is conducted by multiple theories and researches. The point of maximum convergence of these is given by the need to integrate knowledge, skills and attitudes in a coherent and functional way. However, it can be concluded that the design of the competence-based curriculum is a dynamic one, involving different stages and being organized in a systemic manner (Andronache, 2015).

2. The concept of competence-based curriculum assessment

We can not speak about a coherent design of the competence-based curriculum in the absence of a coherent vision on how to measure the effectiveness of it. Therefore, in general, the assessment of formal education is approached as a pedagogical demarche that aims to provide information about the effectiveness and functionality of the process and of the education system as a whole with the aim of improving it.

As a pedagogical practice the assessment was necessary after the creation of the first institutionalized forms of education, but its theoretical

foundation and argumentation was made for the first time in 1949 by Ralph Tyler, in the work "Basic Principles of Curriculum and Instruction". As indicated by Nevo (2006), Tyler gave special attention to the assessment of the students' acquisitions, as a result of the teaching-learning process, then integrating it as a fundamental element in the process of curriculum design. After the 1970 assessment was widened, mainly in USA, from the classroom to the curriculum, to the educational programs and then to the system.

In general, most contemporary theories approach the assessment as an integrated part of the educational process, which aims to identify the effectiveness, the relevance, the importance, and the success of the educational programs, by reference to a predetermined system of indicators. So, regarding the definition of the competence-based curriculum assessment, we consider that this is a complex process that aims to identify, at different levels and from multiple sources, information about the curriculum efficiency and about the extent to which established competences were developed, but also to analyze and to use this information primarily for the purpose of curricular improvement and adjustment.

3. Processuality of the competence-based curriculum assessment. Stages and levels

Because, as we mentioned, curriculum assessment is a dynamic and complex process, Nevo (2006), identifies five major stages of the assessment process of a curricular program. These stages are necessary to provide a comprehensive view on the effectiveness of a competence-based curriculum:

- The understanding of the assessment issues;
- The planning of the assessment;
- The data collection;
- The data analyze;
- The data reporting.

The understanding of the assessment issues is the stage of *reflection on the assessment process*, establishing its purpose and *establishing the criteria* for obtaining information about the curricular process. This is basically the foundation stage of the assessment in order to reduce the risk for an evaluation without a clear purpose.

The planning of the assessment involves *formulating specific objectives of the assessment*, determined after the analysis developed in the first stage and on the basis of the criteria proposed. The assessment planning also involves

the setting of its *duration*, identification of *the methods and procedures*, identification of *data collection tools* as well as the identification of the *samples of subjects* (makers in curriculum design, teachers, students, parents, socio-economic partners, civil society).

The data collection stage is the stage where *methods and assessment tools are applied* to the selected samples from various levels of the education system (macro-, medium- and micro level). This stage is an important one because the accuracy of the data collection determine the quality assessment made; therefore a non-rigorous collection and analysis causes erroneous reporting data which can in this way lead to an inconsistent decisions with the educational reality.

The data analyze, is made after their collection and *involves statistical and qualitative analysis.* Data analysis will be done according to the criteria established in the first stage of curricular assessment, having the role to provide relevant and accurate information about the effectiveness of the curriculum and of the students' competence level development. Information obtained at this stage will be sources for the curricular improvement and for the subsequent decisions for the curricular review.

The data reporting represents the final stage of the curricular assessment and involves *informing educational policy makers, and also teachers, students, parents or society, of the results of the assessment process*. In this stage solutions are also proposed and recommendations are made regarding improving aspects identified as dysfunctional after analysing of data.

So, all those stages described above, are aimed to ensuring both summative and formative assessments. Thus, the assessment of a competence-based curriculum can fulfil 3 main functions: collecting information about the curriculum, curriculum validation and improvement (Nevo, 2006).

Another curricular assessment model is developed by Kirkpatrick (1994), apud. Wolf, et al. (2006). The author suggests four main levels:

- The reaction level;
- The learning level;
- The behaviour level;
- The results level.

The reaction level is the level of obtaining feedback from students regarding the learning experiences in which they were involved, on the level to which they appreciated the educational process as being useful and relevant. So, the reaction level requires a curricular assessment at micro-pedagogic level, respecting the principle of student-centred learning, considering his opinions as relevant to improving curriculum.

The learning level relates to assessment of students and their level of competences development. The results obtained at this level will be, also in this case, sources for improving the curriculum and the educational process. Therefore, the results obtained at this level will be sources of reflection for the teachers.

The behaviour level is the level of identification in practical contexts of the efficiency of the competences development. Therefore, additional to the learning level and interacting with it, the behaviour level aimed to identify the quality of transferring knowledge, skills and attitudes in practical situations.

The results level is the step of curriculum assessment with a high level of generalization, compared with the other three levels. Thus, this level aims to identify the overall performance and students competence development after several years of study. So the results describe an overall average of the success of the students after tests conducted at national or/ and regional level, practically presenting a summary analysis of the facts.

Summarizing the considerations regarding the levels and the stages of the curriculum assessment, we propose the figure below to sum up the philosophy of the assessment of a competence-based curriculum:

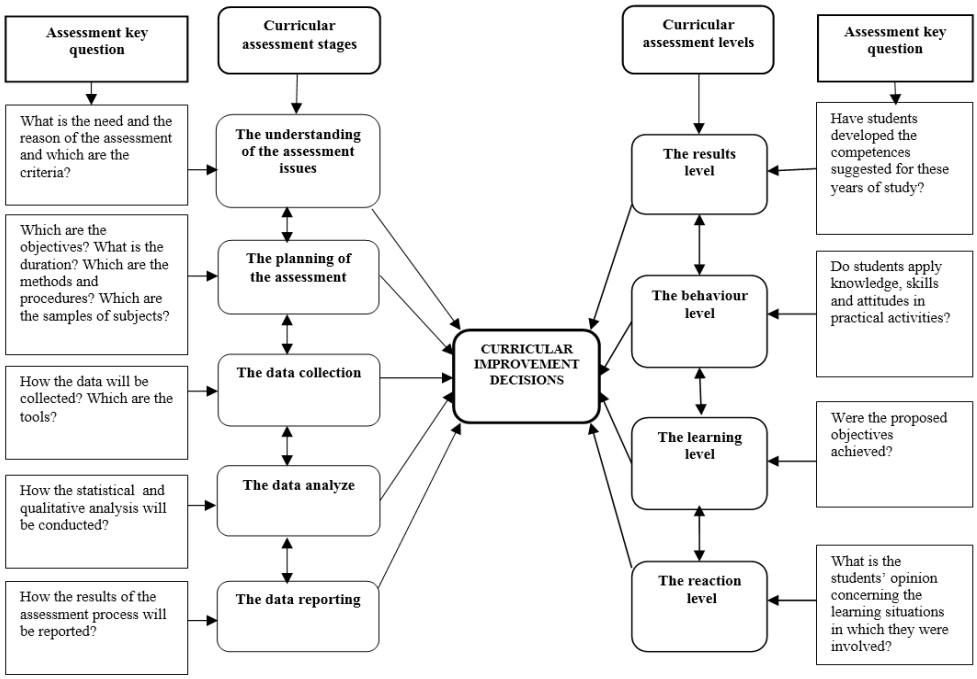

Figure 1. Levels and stages of the curriculum assessment

Conclusions

In conclusion, analysing the characteristics of the four levels and the characteristics of the five stages of curriculum assessment, it can be concluded that they are correlated. Every level and stage helps to assess a particular segment of the curricular process, but all seen overall provides information about the efficiency and functionality of the curriculum, in a systemic approach. So, the competence-based curriculum assessment is very important because we can not speak about a coherent design of the competence-based curriculum in the absence of a coherent vision on how to measure the effectiveness of it.

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AN ASSESSMENT OF THE MOTIVES FOR THE PURCHASE OF ORGANIC FOOD IN HARARE

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ABSTRACT. The remarkable growth in the purchase and consumption of organic food is widely acknowledged by many practitioners and academics in both developed and developing countries, yet in the Zimbabwean context, there seems to be a paucity of research in this field. To address this identified research gap, the current study attempts to examine the motivational factors for the purchase and consumption of organic food in Zimbabwe. An exploratory factor analysis was used to determine the underlying motivational factors from data that were collected from a sample of 200 consumers in Harare, Zimbabwe. The findings indicate that consumers purchase organic food because of six major reasons: is good for their health, assists environmental sustainability, ensuring values and principles, the naturalness of food, some consumers perceive that some selected organic food products are cheap and help improve one's ability to cope with stress. In this regard, an understanding of the motivational factors for the purchase of organic food is of crucial importance to marketers as they are able to craft strategies to meet the needs of organic products consumers.

Key words: *organic products, motivation, consumption, Zimbabwe*

ZUSAMMENFASUNG. Das bemerkenswertes Wachstum beim Erwerb und die Konsumsteigerung dem Bio-Lebensmittel wird weithin von den Fachleuten und Wissenschaftlerinnen in Industrie- und Entwicklungsländernanerkannt und dennoch im simbabwischen Kontext wird relativ wenig zu dem Thema geforscht. Zur Handhabung der ausgemachten Forschungslücken, die vorliegende Studie unternimmt den Versuch der Motivationsfaktoren für den Erwerb und Verbrauch der Bio-Lebensmittel in Simbabwe zu prüfen. Eine explorative Faktoranalyse wurde verwendet, um den grundlegenden Motivationsfaktoren von erhobenen

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Daten zu bestimmen, aus einer Probe von 200 Verbraucher in Harare, Zimbabwe. Die Ergebnisse lassen darauf schließen, dass Verbraucher biologischer Lebensmittel kaufen, wegen folgende sechs Hauptgründe: es ist gesund, unterstützt ökologische Nachhaltigkeit, sicherstellt die Werte und Grundsätze, die Natürlichkeit von Lebensmitteln, einige Verbraucher bestimmen, dass ausgewählten biologische Nahrungsmittel billig sind und verbessert die Stressbewältigungsfähigkeit. In dieser Hinsicht, ein Verständnis der Motivationsfaktoren für den Einkauf von Bio-Lebensmittel ist von entscheidender Bedeutung der Vermarkter, da sie in der Lage sind, Strategien zu gestalten, um die Bedürfnisse der Verbraucher der Bioprodukte zu erfüllen.

Schlüsselwörter: *Bioprodukte, Motivation, Verbrauch, Zimbabwe*

1. Introduction

The consumption of organic food has grown remarkably, both in developed and developing countries. Food and Agricultural Organization (FAO) (2009) estimated that the value of global market for organic food has reached $45 billion (USD) in 2007. According to Roitner-Schobesberger, Darnhofer, Somsook, Vogl (2008) the demand for organic food among consumers in Thailand is on a sharp increase. In addition Zepeda and Leviten-Reid (2014) as well as Zepeda and Li (2007) highlight that its growth can be traced to concerns over the negative environmental impact of conventional agricultural practices, as well as the potential long-term effects of consuming genetically modified food. In Zimbabwe, markets for organic agriculture products have grown rapidly over the past 15 years, driven by increasing consumer awareness, and concerns about food safety, environmental protection and nature conservation (Makatouni, 2012).Although organic food comprises only a small fraction of the food market, its rapid growth has generated much interest among consumers, businesses as well as researchers.

Over the last few years, some Zimbabwean consumer market segments now prefer to consume organic products. This consumption pattern seems to be prevalent in the whole country and as such the phenomenon has become a critical one for marketers. In addition the consumption pattern seems to be influenced by psychological factors. The problem is that the motivations for the preference or shift from other food products to organic products are not very clear to marketers. Marketers therefore need to have information about these psychological factors that influence purchase decisions so that they are bale to

craft strategies that help them satisfy the needs of this market segment. Various studies have been done on the psychological factors influencing the purchase behavior of organic food products but however they have mainly been in developed countries. The growth of the organic products industry has given rise to new opportunities for business growth and sustainable ways of consumption. While fully fledged industries have been blossoming in the developed world, there have not been well documented studies of consumer trends, behaviors and psychological factors behind the purchasing of organic products in developing countries as such as Zimbabwe. This paucity of information is certainly a cause for concern as this has potential to impede the growth of the organic market in any country. Because of this potential for more revenue to be generated, it is vital for business to fully comprehend the market and the psychological factors that are associated with the purchase of these products, in order to come up with marketing strategies to fully capitalize on this consumer need.

Previous research has shown that organic products are usually viewed in positive light but this has not always resulted in more purchasing and consumption of organic food products because of lack of information (Onyango, Hullman and Bellows, 2007). Studies have also shown that psychological factors play an important role in the purchase of products. The studies in this psychology marketing field do show the need for marketers to come up with innovative and informative marketing strategies to satisfy the needs of organic food consumers. In Zimbabwe not many studies have been done to investigate consumer motivations for the purchase of organic products. It is against this backdrop that the current study sought to gain an understanding of this under-researched area in the Zimbabwean context. The results of this psychological marketing study have potential of extending knowledge about consumer perceptions of organic food. The study is necessary as it can help equip marketers with knowledge about consumer perceptions and they can use the knowledge to predict the consumption behavior of organic products.

The growth of the organic products has been unprecedented especially in the western society and a lot of studies have been generated on the trends and motivations in consumer behavior with regards to organic products (Kisaka-Lwayo and Obi. 2015; Krissoff, 2008). While these studies have been highly informative, the present study is relevant because it specifically inquires on the Zimbabwean market with its own uniqueness and challenges. The Zimbabwean economy has been very depressed for a long period and this research will add to the knowledge in consumer perceptions towards organic products.The remaining sections present the literature review, methodology of data collection, analysis, discussion and recommendations of the study.

2. Literature review

2.1 Psychological theories of Motivation

The theory of Reasoned Action created by Fishbein and Ajzen in the 1960s posits that there are pre-existing attitudes in the decision making process of consumers. Consumers are viewed as rational actors who buy products when they expect to get a specific benefit from the product. It means that in the case of organic products, consumers make purchase decisions based on the expectation that they would benefit from the organic products.

On the other hand, Engel, Kollet, Blackwell (EKB) Model of consumer motivations posits that the input phase of the consumer decision making process is critical because it is a stage when consumers are provided with information about the products. The information provided is then used to make a decision about whether to buy the product or not. When marketers of organic products provide consumers with information about the benefits of organic products, they stimulate desire to purchase the product.

The Motivation-Need Theory developed by Maslow in 1943 also assists in explaining the psychological motivation aspects in the organic food purchase. The theory suggests that people act in a certain way because of the need to fulfill their needs which include the physiological, safety, love, esteem and self-actualization. Marketers of organic products do not only create awareness to the product but also create its place on the hierarchy of needs. The theory therefore maintains that messages used by marketers create a sense of need. Corroborating the same view, the theory of Social Status suggests that consumers are motivated to purchase products because they want to be perceived as people 'in the know'. It follows that consumers purchase certain products because they want to be viewed by others as people equipped with product knowledge so that they gain respect of others.

In the same vein, the ego psychology theory suggests that what motivates consumers to purchase products is the desire to enhance their status because there are certain products which signify the status of a consumer. The Trait view point of personality contributes to this subject by stating that the consumers' purchase behavior is influenced by the unique pattern of traits. On other words, consumers display their need to be unique by purchasing certain products which the majority of consumers do not purchase (Mpinganjira, Dos Santos, Botha, Du Toit, Erasmus, Maree and Mugobo, 2013). The authors also use the socio-cognitive theory of personality to explain consumer motivations to buy products. The theory posits that the consumer's personality in influenced by the way he or she thinks and when exposed to products, the consumer usually

searches for information about the product so that when the purchase decision is finally made, the product choice should reflect who he or she is. It demonstrates that consumers are motivated by the need to show who they are when they purchase products.

2.3 Other motivational factors for organic products

Studies have found that the motivational factors for the consumption of organic food products are numerous and varied. According to Bourn and Prescott (2012), apart from health, food safety and environmental considerations, there are other product characteristics to be considered, such as taste, appearance, nutritive value, freshness as well as other sensory distinctions which influence consumer preferences. Studies that investigated the effect of organic food quality attributes on consumer preferences have found varied results. Other studies have found that product quality characteristics affect consumers' preferences for organic food and the other factors are the nutritional value, economic value, freshness, flavor or taste, ripeness, and general appearance of organic food products (Wolf and Cunningham, 2012).

Wolf and Cunningham (2012) also reported that 93% of Canadian respondents prefer food products with good taste. In contrast, Torjusen et al. (2009) discovered that in studies for other parts of the world, the consumers ranked nutritional value and freshness higher than taste and other related quality characteristics.

With specific reference to health, most studies in Western Europe show that most organic users were more concerned about the health benefits which could be derived from these products. According to Padel and Foster (2005) the increasing demand for organic products is in response to information about genetically modified foods in food chain. People want to buy organic products for reasons of maintaining their healthy states, improve their health, preventing illness or preventing food allergies. When keeping the health condition, it is also important for organic consumers to avoid taking foods with chemical residues. To maintain health, consumers choose foods with fewer pesticides and more vitamins and mineral contents. Few studies have been done in the developing world on organic food products and the consumer behaviors with regards to organic food purchase. However, what is apparent from the literature is that consumer choices are not actually uniform and drawing cross cultural comparisons is a difficult exercise. In addition, Krystallis and Chryssohoidis (2005) state that consumer behavior is influenced by ideas, feelings, experiences and actions, along with additional environmental factors, like advertisements and price. This is precisely what this research intends to explore, in an attempt to gain insight

into the motivation for purchasing organic products. In addition, while some studies have been quite insightful in revealing the blossoming of the organic industry in Asia, it is apparent that not many studies have been conducted on the African continent. The scarce literature reveals more about organic farming than consumer motivations. Some expert opinions from scholars like Parrott, Sockyew, Makunike and Ntambi, S. (2006) state that this is due to lack of awareness, low-income levels, lack of local organic standards and other infrastructure for local market certification. While the literature above reveals the extent to which organic farming is prevalent in Africa, this study seeks to understand the consumer behavior and motivations in consuming organic products in Zimbabwe and the perceived benefits of organic products.

3. Methodology

A descriptive cross-sectional quantitative research design was adopted in this study as it allowed for the evaluation of different variables associated with the purchase of organic products. The sample consisted of 200 current and potential consumers of certified organic products from the retail outlets in Harare Metropolitan area.

3.1 The measuring instrument

Items in the instrument were developed from a review of literature and were initially pre-tested with two academics in the health field. Forty-five statements were assembled initially but they were reduced to 39 items after experts' appraisal. Various changes were made to the questionnaire regarding wording and appropriateness to organic food consumption context. The questionnaire contained two sections. Section A contained questions on the profile of the respondents and section B contained a 39 items scale investigating various factors based on a 5-point Likert type scale anchored with 1= strongly agree and 5= strongly disagree.

3.2 Data collection

Self-administered questionnaires were distributed in person to the customers shopping at retail outlets in Harare. Prior to the survey, respondents were informed of the purpose of the study. The respondents were informed that they were under no obligation to complete the questionnaire. Based on the information collected through the literature, a questionnaire was developed to

suit the Zimbabwean context. The questionnaire contained two sections. The instrument was pre-tested with 20 respondents in order to assess the clarity of the questions, to check whether any changes are needed to be made to the questionnaire before using it for the main study.

3.3 Data analysis

Data were analyzed using the Statistical Package for Social Sciences (SPSS 21). Descriptive statistics were first used to establish a demographic profile of the respondents. Second, the data was subjected to exploratory factor analysis to identify the factors influencing consumers to purchase organic products.

4. Results

4.1 Profile of respondents

A total of 200 potential respondents were approached to participate in the main survey. Of these, 187 questionnaires were returned, resulting in a 93.5 % response rate. Of the 187 responses used in the study, the survey comprised 64.4 percent males (n=121) and 35.2 percent females (n=66). 41% of the respondents were between the ages of 20 to 35 years and this was also the case with those aged between 36-55 years as they also constituted 41% of the respondents. However, those above 56 years old were only 17.6% of the respondents. 41% (n=77) of the respondents had degrees as their highest academic qualifications, those who had Ordinary Levels, Diplomas and Masters Degrees each constituted 17.6% of the respondents' population whilst only 5.9% had Advanced Levels.

4.2 Exploratory Factor Analysis (EFA)

Factor analysis was used to determine the principal motivational factors behind purchasing of organic products in Zimbabwe. Table 1 shows that the Kaiser-Meyer-Olkin (KMO) value for this study is **0.695** which shows that the data were suitable for factor analysis because the minimum threshold for sampling adequacy is 0.5 (Parsian & Dunning, 2009). In addition, the Bartlett's Test of Sphericity has an associated p-value smaller than .001 which indicates suitability of the dataset for the analysis.

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.695
Bartlett's Test of Sphericity	Approx. Chi-Square	3290.424
	Df	105
	Sig.	.000

The principal component analysis method was used to extract the number of main factors that motivate consumers to purchase and consume organic products. The procedure extracted six motivational factors as depicted in Table 2.

Table 2. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.818	21.901	21.901	4.818	21.901	21.901	3.615	16.430	16.430
2	3.476	15.802	37.703	3.476	15.802	37.703	3.369	15.315	31.745
3	3.055	13.885	51.588	3.055	13.885	51.588	3.054	13.880	45.625
4	2.521	11.459	63.047	2.521	11.459	63.047	2.770	12.589	58.213
5	2.381	10.822	73.869	2.381	10.822	73.869	2.704	12.290	70.504
6				1.950	8.864	82.733	2.690	12.229	82.733

Extraction Method: Principal Component Analysis.

Table 2 shows that six factors were extracted because they met the requirement of having an eigenvalue of above 1.00. The six motivational factors explain over 82.733% of the total variability in the data. Therefore, this leads to the conclusion that to explain the data a six factor solution will probably be adequate.

The study went further to test the factor loadings using the varimax rotation method to identify the items that load to the six different factors. The factors loadings are shown in table 3 below.

Table 3. Rotated Component Matrix

	Component					
	1	2	3	4	5	6
	Good for health	Environmental sustainability	Ensures values and principles	Natural and untarnished	Saves income	Improves ability to deal with stress
Healthy	.918					
Nutritious	.901					
Good for skin	.563					
Low calories	.809					
Control weight	.691					
Energy giving	.691					
Cope with stress						.889
Relaxes						.949
Keeps me alert						.950
No additives				.939		
No artificial ingredients				.944		
Chemical free				.946		
Bought close					.963	
Value for money					.899	
Not expensive					.923	
Doesn't compromise principles			.981			
Human rights respected			.962			
Doesn't conflict values			.956			
No pain for animals		.796				
Environmentally friendly packaging		.861				
Better for environment		.757				
Wildlife protection		.745				
Cronbach alpha overall score 0.745	0.877	0.855	0.924	0.946	0.935	0.934

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

The factor analysis procedure led to the removal of redundant variables and as a result six factors were identified to represent the variables of the motives for purchase of organic foods. The next procedure was to name the factors and to discuss the composition of each factor.

4.3 Naming and interpretation of the factors

Factor 1: Good for health

The first factor labeled good for health has an eigenvalue of 4.818 and a percentage of variance of 21.901%. This factor comprises six items and these items are namely that organic food, keeps me healthy with a factor loading of 0.918, it is nutritious (0.901), good for skin (0.563), is low in calories (0.977), helps control weight (0.691) and provides enough energy to get through physical exercise programs (0.691). The Cronbach alpha for this factor yielded a value of 0.877, indicating the reliability of the factor. These findings are in line with Roitner-Schobesberger, Darnhofer, Somsook, & Vogl (2008) who in their study in Thailand discovered that consumers purchase organic food products for mainly for health reasons. This has led some consumers to shift to organically produced alternatives from conventional products. According Van Duyn & Pivonka (2000) several consumer studies undertaken in most parts of the world to assess consumer perceptions about organic foods concluded that consumers' purchases are mainly driven by the notion that organic products have better health benefits. This view is also supported by Wang et al. (2007) who reported that 76% of survey respondents from China believed that organic food is safer than conventional alternatives.

Factor 2: Environmental sustainability

Factor two was labeled 'environmental sustainability' and it describes how the purchase and consumption assists in sustaining the environment. This factor explained 15.802% of the total variance with an eigenvalue of 3.476 as well as a Cronbach alpha score of 0.855, which indicated the reliability of the factor. This factor is comprised of four components which include the fact that organic food products have been produced in a way that animals have not experienced pain, with a factor loading of 0.796, are packaged in an environmentally friendly way (0.861), are prepared in an environmentally friendly way (0.757), and have been produced in a way that animals' rights have been respected (0.745). This is in line with Debnath, Kishore Vijaya & Jain (2015) who postulate that the increased focus on the environment has also influenced consumer choices towards organic food products. In addition McEachern & Mcclean (2002) also made an observation that the general perception of conventional agricultural systems, compared to organic production, tend to have long term health implications as well as adverse environmental effects. This has led some consumers to shift to organically produced alternatives from conventional products. Additionally Wolf (2012) found that U.S. consumers rated the attributes associated with organic food products, such as environmental friendliness, as "somewhat desirable" or "very desirable". This

was also the case in Thailand as Sangkumchaliang and Weng-Chi Huang (2012) also discovered that consumers purchase organic food products because they were produced in way that safeguarded the environment.

Factor 3: Ensures the conservation of values and principles

Factor three was labeled 'ensures values and principles', describes how organic food products ensure the conservation of values and principles. This factor explained 13.885% of the total variance with an eigenvalue of 3.055 as well as a Cronbach alpha score of 0.924, which indicated the reliability of the factor. This factor comprised of three variables which include the fact that organic food products are in harmony with my religious views and principles with a factor loading of 0.981, come from a country in which human rights are respected (0.962) and have been prepared in a way that does not conflict with some political values (0.956). These findings are in line with Thogersen (2010) who states that political and religious factors such as regulations, principles and government initiated market development activities have been known to have a major impact on the availability as well as frequency of purchase of organic products for consumers. Shifferstein (2010) adds that even in cases where similar attitudes between different countries were depicted, cultural differences lead consumers to seek different values when making purchasing decisions on organic food products.

Factor 4: It is natural and untarnished

The fourth was named 'natural and untarnished' and has an eigenvalue of 2.521 and a percentage of variance of 11.459. This factor comprises three items which consist of the idea that organic products contain no additives, with a loading factor of 0.939, they contain no artificial ingredients, with a loading of 0.944, and are certified free of chemical and hormones, with a loading factor of 0.946. The Cronbach alpha for this factor yielded a value of 0.946 which indicates the reliability of the factor. This is in line with Chen (2009) who discovered that respondents preferred organically produced food as they perceive it to be more natural and healthy, compared to conventional food. Jolly (1991 in GadMohsen & Dacko, 2013) established that consumers buy organic produce because they perceive that organic produce has no artificial fertilizer, no growth regulators, no pesticides and is residue free. A UK survey conducted by Hutchins and Greenhalgh (2007) also produced similar results as it showed that consumers were motivated to purchase organic food products because of absence of chemicals and growth hormones. According to the Soil Association of UK (2013) some of the benefits of organic foods in the eyes of consumers is the fact that they trust that such foods are better for the environment and wildlife protection.

Factor 5: Saves income

Factor five was named 'saves income' and describes how purchasing organic food products save income. This factor explained 10.822% of the total variance with an eigenvalue of 2.381 as well as a Cronbach alpha score of 0.934, which indicated the reliability of the factor. This factor comprised of three variables which include the idea that organic food products, can be bought in shops close to where I live, with a factor loading of 0.963, are good value for money (0.899), and are not expensive (0.923). This is contrary to Zanoli and Naspetti (2002) who state that organic food products are known to have premium prices. Therefore, this debunks the statement that organic food products are not expensive. However, Cicia et al. (2012) argue that the higher prices do not unequivocally constitute a barrier to organic consumption but that high prices function as a signal of high quality. Zanoli and Naspetti (2002) also observed that in the case of Italian olive oil consumers expected the organic products to be more expensive hence if it was not, then this was interpreted as a sign of low quality.

Factor 6: Coping with stress

The sixth factor which was labeled 'coping with stress' has an eigenvalue of 1.950 and a percentage of variance of 8.864%. This factor comprises three items and these items are assessing the idea that organic products help to cope with stress, with a factor loading of 0.889, help to relax, with a factor loading of 0.949, and keeps the consumer alert, with a factor loading of 0.950. The Cronbach alpha for this factor yielded a value of 0.935, indicating the reliability of the factor. Therefore, as noted above, organic food products improve the consumers' ability to deal with stress and this increases the desire to consume more. For example, when some individuals are stressed, they consume organically produced peanuts as they consider that this might relieve their stress.

Therefore, in summary, the most important factor of the motives for the purchase of organic food products in Zimbabwe was that they provide good health, followed by the fact that they promote environmental sustainability, save income, help to deal with stress and because of their natural state. Whilst the least important motive for the purchase of organic food products in Zimbabwe was that they ensure conservation of values and principles. This is in line with a number of studies and scholars such as Sangkumchaliang and Weng-Chi Huang (2012) who observed that consumers in Thailand purchase organic food products for mainly health reasons. In addition, Shifferstein (2010) also shared similar sentiments as he noted that in most countries, worldwide consumers tended to place health, food safety and environmental concerns at the top of the preference ranking. If marketers have to improve on the purchase of organic products there is need to strategize on how to convey these motives to the potential market for organic products.

5. Managerial implications

The results of the current study make significant contributions to both academic as well as practical realms. One academic contribution is the identification of the factors that motivated consumers to purchase organic food products. The findings showed that there were some similarities between the motives and barriers to purchase of organic food products in Zimbabwe as in other nations like Italy, United Kingdom as well as the United States of America. To the practitioners, the study contributes in developing a framework that could guide marketers of organic products to improve the marketing of organic food products. Improved marketing will lead to more demand for organic products and farmers will benefit from increased demand.

The six important motivational factors highlighted by the study should form the integral part of marketing programs by all concerned marketers of organic products in Zimbabwe. Their marketing drives should be focused on highlighting to the consumers about the benefits of organic food products. The study also has provided evidence that the consumers' purchase behavior is affected by their perceptions of organic food products. The study therefore furthers insights about the benefits that marketers need to emphasize when they want to convince consumers to purchase organic food products.

6. Limitations

Possible limitations to this research might be that the study focused exclusively on the urban population and the population was also only drawn from individuals who live in Harare. This was due to time and resources available for the study. Therefore, due to the difference in the structure of urban and rural populations there might also be differences in their motives and barriers to the purchase of organic food products in those areas. Hence the results cannot necessarily be generalized to other contexts. The researchers propose that a further study should be conducted on the similarities and differences between the motives to the purchase organic food products in rural and urban areas in Zimbabwe. This study will help policy makers to identify were improvements need to be made in the distribution and production of organic food products in Zimbabwe.

7. Conclusion

In the context of Zimbabwean organic products, consumers purchase organic food products mainly because of six identified motives, namely: is good for their health, assist environmental sustainability, ensure conservation of ideal values and principles, are natural and untarnished, save income and help to deal with stress.

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