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## OMAGIU MENTORULUI NOSTRU

### A HOMAGE TO OUR MENTOR

Professor **Miron Ionescu** at 85

If we grant ourselves a small respite to cast a reflexive, clear, inquisitive and calm (passionless) glance around, we find true “schoolmen”, bearers of values and living traditions among the cast of Romanian educators.

One of these “schoolmen” is PROFESSOR MIRON IONESCU. Born July 30, 1933 in the village of Izvorul Rece, the commune of Vaideeni, Vâlcea County, graduated in 1956 the studies of the Pedagogy-Psychology Faculty of “Victor Babeş” University of Cluj, and he has been practicing for four years in pre-university education in Arad County in Slavici home village. He was a teacher at the Şiria Special School and then three years director at Şiria General School. In 1960 he left the Arad area where he left good colleagues and collaborators such as Vasile Popeangă, Mircea Micu, Filu Drăgoi, Gusti Herlo, Traian Chevereşan etc., in order to begin his academic career as an assistant at the Pedagogical Department of the “Babeş-Bolyai” University of Cluj-Napoca. For Miron Ionescu, years of study and professional work followed, which were completed in 1970 with his Doctorate in Pedagogy under the coordination of his mentor, Professor Dimitrie Todoran. The Doctoral course then led him towards his professional completion, reaching the highest academic title in 1990, a Professor but also a Doctoral coordinator. Through these two attributes, Professor Miron Ionescu has formed and developed a plethora of educators who are now spreading throughout Romania.

Since the destiny has come to meet us, we have come to realize that man and Professor Miron Ionescu has a culture-fed intelligence, moral and spirit-based, nurtured by culture because it provoked and provokes his disciples to read, ask questions, have doubts, stupor, and even sadness. Moral intelligence because, by his example, he showed us how to not be “tricks, lepers or villains”. Spiritful intelligence, because it shared with us that form of feelings that overcomes itself and even sacrifices itself to see the sky of bright stars.

We thank Professor Miron Ionescu for showing us that the intelligence without spirit, morality and culture does not promise reaching the meaningful **real**, that **real** in which we kindly ask him to keep us in his heart.

We, the former Doctoral students of Professor Miron Ionescu, can only be grateful, at his anniversary of 85 years, for the “miraculous encounter”, filled with the subtle spices of his intellectual and human beauty and for

guiding us towards completion of Doctoral studies and the persuasion of our becoming in the academic career.

And we sign:

PhD student Herlo Dorin - 1993-1998 - currently prof. univ. dr. habil., Faculty of Educational Sciences, Psychology and Social Work at “Aurel Vlaicu” University of Arad, former director of DPPD, founder of educational sciences field in “Aurel Vlaicu” University of Arad,

PhD student Roman Alina - 1998-2004 - now prof. univ. dr. habil., Dean of the Faculty of Educational Sciences, Psychology and Social Work at “Aurel Vlaicu” University of Arad and Associate Professor at the Doctoral School “Education, Reflection, Development”, at “Babeş-Bolyai” University of Cluj-Napoca,

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## **PROFESOR UNIVERSITAR DOCTOR MIRON IONESCU, la 85 de ani**

Dacă ne acordăm un cât de mic răgaz aruncând în jur o privire reflectivă, lucidă, curioasă și nepătimașă, vom găsi în tagma educatorilor din România adevărați „oameni ai școlii”, purtători de valori și de tradiții vii.

Unul dintre acești „oameni ai școlii” este PROFESORUL MIRON IONESCU. Născut la 30 iulie 1933 în satul Izvorul Rece, comuna Vaideeni, județul Vâlcea, a absolvit în 1956 studiile Facultății de Pedagogie-Psihologie a Universității „Victor Babeș” din Cluj, profesând patru ani în învățământul preuniversitar din județul Arad în comuna lui Slavici. A fost profesor la Școala Specială Șiria și apoi trei ani director la Școala Generală Șiria. În 1960 părăsește meleagurile arădene unde-și lasă buni colegi și colaboratori precum Vasile Popeangă, Mircea Micu, Filu Drăgoi, Gusti Herlo, Traian Chevereșan etc., pentru a păși în cariera universitară ca asistent la Catedra de Pedagogie a Universității „Babeș-Bolyai” din Cluj-Napoca. Pentru universitarul Miron Ionescu au urmat ani de studiu și efort profesional care s-au săvârșit în 1970 cu obținerea doctoratului în pedagogie sub coordonarea mentorului Domniei sale, profesorul Dimitrie Todoran. Săvârșirea doctoratului a curs apoi spre desăvârșirea profesională, ajungând în 1990 la cel mai înalt titlu academic, profesor dar și coordonator de doctorat. Prin aceste două atribute, Profesorul Miron Ionescu a format și dezvoltat o pleiadă de educatori care sunt acum răspândiți în toată România.

De când destinul a făcut să ne întâlnim, ne-am dat seama că omul și profesorul Miron Ionescu are o inteligență hrănită de cultură, bazată pe morală și plină de spirit. Hrănită de cultură fiindcă a provocat și provoacă discipolii săi să citească, să-și pună întrebări, să aibă dubii, stupori și chiar tristeți. Inteligență morală fiindcă prin exemplu-i ne-a arătat cum să nu fim „șmecheri, lepre ori lichele”. Inteligență plină de spirit fiindcă ne-a împărtășit acea formă a trăirilor care se depășesc pe sine și chiar se sacrifică pe sine pentru a vedea cerul stelelor strălucitoare.

Mulțumim Domnului Profesor Miron Ionescu pentru că ne-a demonstrat că inteligența fără spirit, morală și cultură nu promite veniri spre realul cu sens, spre realul în care îl rugăm să ne poarte în suflet.

Noi, foștii doctoranzi arădeni ai Domnului Profesor Miron Ionescu nu putem decât să-i fim recunoscători și la împlinirea vârstei de 85 de ani, pentru „întâlnirea miraculoasă”, încărcată de mirosurile subtile ale frumuseții intelectuale și umane ale Domniei sale și de ghidarea spre finalizarea doctoratelor dar și a persuadării devenirii noastre pe scară universitară.

Și semnăm:

- Doctorand Herlo Dorin – 1993 – 1998 – actualmente prof. univ. dr. abil., Facultatea de Științe ale Educației, Psihologie și Asistență Socială din cadrul Universității „Aurel Vlaicu” din Arad, fost director al DPPD, fondator al domeniului „Științele educației” în Universitatea „Aurel Vlaicu” din Arad,
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- Doctorand Pătrăuță Teodor – 2003 – 2006 – actualmente prof. Univ. dr. la Facultatea de Științe Socio-Umane și Educație Fizică și Sport din cadrul Universității de Vest „Vasile Goldiș” din Arad,
- Doctorand Pop Vasile-Ioan – 2004 – 2011 – actualmente lect. Univ. dr. la Facultatea de Științe-Socio Umane și Educație Fizică și Sport din cadrul Universității de Vest „Vasile Goldiș” din Arad,
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## **ON DISCOVERING AND PROFITING FROM THE SENSE OF BELONGING LITERATURE**

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**Abstract:** *A sense of belonging (SoB) is a recognised and valued concept in education, associated with increased student attainment, improved learners' satisfaction and lowered attrition rates. Some scholars even assert that learners are unable to fulfil the goals of higher education without first having acquired a SoB. I am suggesting that a SoB should be generated purposefully in any online learning environment, to address learners' well-documented feelings of isolation, marginalisation, alienation and loneliness. I explore a definition of this concept and then summarise what I have found in the work of researchers who consider it important that their learners develop a sense of belonging. Thereafter, I outline the principal features which contribute to a learner's sense of belonging, and what is known of how they are promoted (or frustrated) by institution, course teams or individual tutors. Finally, I indicate the immediate priorities for teachers like myself who wish to promote and evaluate a sense of belonging for their learners in their own context.*

**Keywords:** sense of belonging; online learning;

### **Introduction and explanation**

After having worked with students online for over a decade, I had become aware that those learners who had flourished in their studies appeared to have a distinct connection to the course. Those who had developed significant relationships both with myself as the tutor and with their peers, had also developed in self-confidence, self-esteem and self-efficacy. It was also promising to see their interpersonal and cognitive skills

and abilities thrive. What was it that did this? Last year I attended a conference where I was fortunate to listen to Thomas (2017) outline her work on Sense of Belonging, and the penny dropped for me.

It is less than two years now since I encountered the term ‘sense of belonging’. During a considerable career in teaching, I have been working to generate this sense of belonging on the part of my students, but without knowing that that was what I was doing and without rationalising the elements in my approach which make a positive contribution to this outcome. It has certainly long mattered to me to make my students feel at home, valued and members with me of a class group linked not just by shared educational aims, but by a strong feeling of belonging to a significant learning community. I wanted them to feel a sense of connection. However, I would have been at a loss to pinpoint how I had been doing this. Thomas’s talk encouraged me on to organise my thinking.

I started to read recent papers about ‘sense of belonging’. I was excited to find this concept effectively and motivatingly summarised, and to some extent given academic status, in the various writings I discovered about students having a sense of belonging. I found myself devouring these writings, quickly finding definitions and clarification of my established intuitive practice. I have been actively sharing that enthusiasm for this formally titled aspect of online pedagogy with my colleagues, my students and others. Now, for this conference I wanted to share that enthusiasm with delegates, hoping that for some I could spread the message I have been discovering about the importance for students, and especially online students, of having a sense of belonging. I am sure that there are others who have already progressed further than I am, and who I hope will be prompted to share their practices and experiences with us all through our conference networking.

## **Outline**

I open with a clear definition of this concept. Then I summarise what I have found to date in the work of researchers who consider it important that their learners develop a sense of belonging. Thereafter, I outline the principal features which contribute to a learner’s sense of belonging, and what is known of how they are promoted (or frustrated) by institution, course teams or individual tutors. By this point, I am aware that many readers will be wondering about the demands on tutors’ time; I attempt to address this. Finally, I indicate the immediate priorities for teachers like myself who wish to promote and evaluate a sense of belonging for their learners in their own context. I cite one or two key sources and recommend for your further

reading a few texts which I have found useful and thought-provoking. If you would like further information, do please contact me.

## **Definition**

Many definitions of the concept of sense of belonging (SoB) in an educational context have been published. I am attracted to that provided by Goodenow (1993) who described a sense of belonging as comprising feelings of:

being accepted, valued, included, and encouraged by others (teachers and peers) in the academic classroom and of feeling oneself to be an important part of the life and activity of the class. More than simple perceived liking or warmth, it also involves support and respect for personal autonomy and for the student as an individual (p.25).

This highlights two key attributes in the concept. The first involves feelings of being accepted, needed, mattering and valued. The second includes feelings of fitting in, being connected to a group, class, subject or institution or to all of these. Both originate in relationships, and especially in tutor/student relationships.

## **Sense of belonging and online learning**

Before I devoted much of my continuing professional development to SoB, I had been finding much inspiration in the writings of Garrison, and his followers in Canada. These works address the planning, delivery and impact for online learning programmes centred upon Communities of Inquiry. After listening to Thomas and reading some of her writings, I recalled that Garrison conceives the Community of Inquiry Framework for online education as providing “a collaborative experience, which includes a sense of belonging and acceptance in a group with common interests” (Garrison, 2017 p.35). Having a strong sense of belonging to their institution, their course, their teachers and their peer group, has been rated key to academic success and persistence for online tertiary learners. Strayhorn even maintains that a SoB is essential if higher order outcomes such as understanding and self-actualisation are to be fulfilled. Researchers, especially those in the US such as Freeman, Anderman, & Jensen in 2007 and Ostermann in 2000, have reported the important link between SoB and

improved academic engagement and achievement, heightened self-confidence and self-efficacy.

Online learning can be a lonely activity from the start. Learners new to this experience can easily feel lost. Initial problems for online learners with navigation through a wealth of materials and an accumulation of new types of demand such as online group work can readily generate feelings of anxiety, frustration and of being out of their depth. For many, the very thought of posting their thoughts into an online discussion forum is a daunting and even threatening prospect. Clearly their need for a sense of belonging and of being valued is most important if they are to function confidently in this new learning environment, to flourish in the diverse online educational spaces, and to achieve their personal and professional goals. The researchers who have studied the importance and impact of SoB for online learners provide much insight. Reading these researchers' work has subsequently contributed strongly to the planning of my teaching, to my work as an educational developer, to my own further professional development, and to my eagerness to become engaged in action-research in this field. Amongst these roles, direct online tutoring is the one likely to have the greatest impact, so I should start there.

### **Promoting a sense of belonging**

As a tutor working within the Community of Inquiry Framework, I follow Garrison in the conviction that I should 'establish a feeling of belonging to the critical community that must develop over time' (Garrison, 2011, p. 32), since that is an 'essential facilitating condition for engagement in critical discourse' (p. 37). As a tutor, I have found that I can promote a sense of belonging by quickly developing open communications with and between learners so that they gain a sense of being meaningfully connected to and engaged their peers, and with me as their tutor. My colleague Cowan and I have established that trust amongst peers and with their tutor is an essential foundation for effective online learning. Cowan (2013) has written of this elsewhere. Trust originates in, and is then nurtured by, a sense of belonging. Any online tutor should therefore set out immediately to establish a feeling by learners of being welcomed into a community where trust features naturally (Garrison, 2011; pp. 88-89). I have found in my own experience that the nature, type and tones of the online tutor's interactions with learners can create a trusting, caring and encouraging environment, featuring open communication. This can be achieved by:

- Contacting learners as soon as possible, modelling frank, informal and helpful interactions as a norm
- Anticipating and resolving learners' affective needs
- Unobtrusively facilitating development of the abilities needed for online learning
- Showing awareness of learners' current concerns and of their successes
- Frequently nudging learners towards constructive interaction with peers.

### **Institutional and course team initiatives**

Important as the contribution of tutoring can be to the development of learners' sense of belonging, it is not a first priority – chronologically. For efforts to establish a sense of belonging should begin before any learners are enrolled, in the creative planning of the arrangements made for their studying. The institution and course team should plan to immediately and effectively demonstrate a genuine concern to encourage and enable learners to engage effectively with the demands of their course, and to do so as they take their first steps.

Online learners will not be able to cope effectively with their cognitive activity unless they already have a clear impression of the support services that will be available to them. Preferably, these should be mapped in an informative, though not a directive, way. For learners need to identify and access the sources from which they can valuably enrich their course-related understandings in their chosen directions and in their own individual ways. Unfortunately, online learners nowadays often report problems with navigation, with searching ineffectively for services, and in needing better and more supportive advice and assistance. Such problems can inhibit learning and generate feelings of disenchantment with the course and with the institution. Support services should be readily available and plan to respond to all inquiries in a helpful, warm and welcoming manner.

Planning to embody a sense of belonging should go beyond arranging for such opening encounters. Online learners who are engaged in meaning-making will find that process enhanced in terms of their sense of belonging by the existence and use of two noteworthy features in their programme. Firstly, they should have opportunities for relevant groupwork in which learners can work together to explore their emergent understandings through planned interactions within the community. Secondly, their learning will be enhanced (but not directed) by the structuring of effective loops in the

programme providing constructive peer feedforward, which will also nurture a sense of belonging to the community.

Institutions and course teams who aim to engender a sense of belonging on the part of online students should therefore

- Structure course plans to ensure that support services are ready to provide friendly and caring assistance and advice at the outset
- Structure programmes to build a sense of belonging by featuring appropriate socio-constructivist activities
- Arrange peer-interaction to provide rapid constructive collegial feedforward, and nurture a meaningful sense of belonging to a community
- Incorporate informed tutor feedback showing interest in work in hand, as well as offering constructive comment
- Show each tutor's immediate awareness and appreciation of valuable issues and concepts emerging in ongoing community learning activity
- Support learner engagement in activities for both individuals and groups, leading to a sense of worth and mattering, and promoting sense of belonging
- Evaluate the arrangements made to promote a sense of belonging and enhance accordingly.

### **How sustainable is it to promote a sense of belonging?**

Cowan and I are currently involved in finalising a paper whose provisional title, at present, is: *Promoting virtual relationships to engender a sense of belonging online*. We are trying to offer practical suggestions for academics. We attempt to include nothing which we ourselves would not undertake in the normal course of our teaching duties, and little if anything which we would be reluctant to suggest to our colleagues. Many of our suggestions entail a change in emphasis or style and a few demands much in the way of additional commitment. Consequently, we are witness to our conviction that promoting a sense of belonging need not be other than sustainable.

### **Action-researching a sense of belonging**

I have found much in the SoB literature to inspire me; I have also emerged from my reading with important and unanswered questions. Three



of the most immediate, for me, my colleagues in our own courses and Cowan are:

1. What experiences in my online courses generate a sense of belonging for my students – and what experiences have the contrary effect? Why has this been so for the learners concerned?
2. What effect does having, or not having, a sense of belonging has on learning behaviour and learning achievement for my students?
3. What can I do to further promote a sense of belonging on the part of my students?

Even as I have been writing this conference paper, I was receiving encouraging reports of questionnaire responses by students currently studying on courses offered by myself and three colleagues. We tutor have combined as action-researchers to seek individual answers in our own context to these three questions, centred on critical incidents with positive or negative impact. The second stage of this inquiry will take the form of carefully planned interviews by an external researcher with some of the responding students.

### **What reading do I recommend?**

I went on to read the report by Thomas soon after I had heard her speak; I warmly commend this report to you:

Thomas, L. (2012). *Building student engagement and belonging at a time of change in higher education*. London: Paul Hamlyn Foundation. Retrieved from <https://www.heacademy.ac.uk/knowledge-hub/building-student-engagement-and-belonging-higher-education-time-change-final-report>.

I found myself returning to Strayhorn again and again. I have warmed to his care and concern for the underprivileged who so need a sense of belonging when they venture into tertiary education:

Strayhorn, T. (2012). *College students' sense of belonging: A key to educational success for all students*. Oxon, UK: Routledge.

Garrison is rightly regarded as the guru of Community of Inquiry learning online. His book contains more than that, and implicitly assumes

that our online learners should have a sense of belonging. I recommend both editions of his seminal work:

Garrison, D. R. (2011). *E-learning in the 21st century: A Community of Inquiry framework for research and practice* (2nd Ed.). New York: Routledge

Garrison, D. R. (2017). *E-learning in the 21st century: A Community of Inquiry framework for research and practice* (3rd ed.). New York: Routledge

I have also referenced the definition by Goodenow in 1993. I highly recommended to you her seminal work in the early 1990s with adolescents:

Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of Early Adolescence*, 13(1), 21-43.

John Cowan has long campaigned for the importance of trust in tutor/student relationships. The principles he outlined regarding facilitating reflective journaling have widespread application:

Cowan, J. (2013) Facilitating reflective journaling – personal reflections on three decades of practice. *Journal of Learning Development in Higher Education*. Issue 5, March. ISSN: 1759-667X

Finally, I have been influenced by the significant work in the United States, exploring the importance of SoB for students who perceive themselves as marginal to campus life, such as learners who are non-traditional according to class, race, ethnicity, sexual identity, income and disability. I would recommend:

Hausmann, L. R. M., Ye, F., Schofield, J. W., & Woods, R. L. (2009). Sense of belonging and persistence in white and African American first-year students. *Research in Higher Education*, 50(7), 649-669.

Osterman, K. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323-367.

Vaccaro, A., Daly-Cano, M., & Newman, B. M. (2015). A sense of belonging among college students with disabilities: An emergent theoretical model. *Journal of College Student Development*, 56(7).

## **Conclusion**

Throughout my life, I know that the presence, or absence, of a sense of belonging in professional settings makes a significant difference to my own motivation and commitment, professionally and personally. For my students it is something that I strive to promote in all my interactions and in my friendships both within and outwith tertiary education.

## **Acknowledgements**

This paper, and my current research explorations, would not have been possible without my mentor, my guide and my special friend, Professor John Cowan. Whilst it is not possible for him to join with us at the conference, he has been a guiding light throughout my doctoral work and now its continuation in our collaborative research enterprises especially Sense of Belonging. He is an inspiration; his passion for his students and his commitment to excellence in learning and teaching cannot be matched.

## **References**

- Cowan, J. (2013). Facilitating reflective journaling – personal reflections on three decades of practice. *Journal of Learning Development in Higher Education*. Issue 5, March. ISSN: 1759-667X
- Garrison, D. R. (2011). *E-learning in the 21st century: A Community of Inquiry framework for research and practice* (2nd Ed.). New York: Routledge
- Garrison, D. R. (2017). *E-learning in the 21st century: A Community of Inquiry framework for research and practice* (3rd ed.). New York: Routledge
- Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of Early Adolescence*, 13(1), 21-43.
- Hausmann, L. R. M., Ye, F., Schofield, J. W., & Woods, R. L. (2009). Sense of belonging and persistence in white and African American first-year students. *Research in Higher Education*, 50(7), 649-669.
- Osterman, K. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323-367.

Strayhorn, T. (2012). *College students' sense of belonging: A key to educational success for all students*. Oxon, UK: Routledge.

Thomas, L. (2012). *Building student engagement and belonging at a time of change in higher education*. London: Paul Hamlyn Foundation. Retrieved from <https://www.heacademy.ac.uk/knowledge-hub/building-student-engagement-and-belonging-higher-education-time-change-final-report>.

Vaccaro, A., Daly-Cano, M., & Newman, B. M. (2015). A sense of belonging among college students with disabilities: An emergent theoretical model. *Journal of College Student Development*, 56(7).

## DEVELOPING DIGITAL LITERACIES THROUGH CONTINUING PROFESSIONAL DEVELOPMENT

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**Abstract:** *Digital technologies have much to offer education and to enable learners to interact with rich multimedia, and to communicate and collaborate. This paper argues that to harness the potential of digital technologies for learning new digital literacies skills are needed. To support teachers in the development of these literacies new and innovative forms of Continuing Professional Development are needed. The paper concludes with a description of the 7Cs of Learning Design framework, which aims to help teachers make more pedagogically informed design decisions that make appropriate use of digital technologies.*

**Keywords:** *Continuing Professional Development; Digital Literacies; Digital Technologies; Learning Design;*

### **Introduction**

This paper focuses on innovative models and practices of Continuous Professional Development (CPD) in order to improve the effectiveness of teaching and learning in higher education. The premise is that effective and innovative CPD has the potential to improve academics' capacity to use new pedagogical models (HoTEL, n.d.) for teaching, at the same time as enhancing outcomes for learners. It describes the 7Cs of Learning Design framework, which aims to help teachers make pedagogically informed design decision that make appropriate use of digital technologies.

### **Digital technologies**

Technology affects every aspect of our everyday lives and has changed the way we learn, communicate, locate information and acquire knowledge (Kelentric et al., 2017). Digital technologies have significant promise in terms of facilitating innovative learning and teaching. They offer a rich

variety of ways in which learners can interact with multimedia content and communicate and collaborate. Social media mean that learners are now part of a global community of peers and mobile devices mean that learning any where, anytime is now a reality. The rise of Massive Open Online Courses (MOOCs) are challenging existing educational offerings and new forms of recognition of learning are arising; such as certificates of participation, digital badges and application of blockchain technologies (Witthaus et al., 2016; Grech and Camilleri, 2017, OUA, 2018). New digital technologies are arising all the time, such as augmented reality and artificial intelligence and these clearly have significant implications for learning and teaching.

Digital technologies provide opportunities for great flexibility, interactivity, and accessibility for engaging teaching and learning at individual, group and societal levels (Lawrence and Tar, 2018). The NMC Horizon and the UK OU's Innovating Pedagogy reports provide an overview of key emergent digital technologies and consider the implications for practice (NMC Horizon report, 2017; Innovating Pedagogy, 2017). The key point is that innovative and impactful CPD has never been more important in order to help individuals and institutions respond to these developments and harness the educational potential of new digital technologies.

Technology-enhanced education offers a variety of opportunities for higher education institutions (HEIs), such as: widening the student body, engaging with non-traditional and remote learners, blending classroom and virtual higher education, cross-border cooperation between institutions, more adapted/tailor-made provision, and mainstreaming of a more interactive teaching and learning experiences (Eurydice, 2017; Haywood et al., 2015; Scott, 2015a, Scott, 2015b, Scott, 2015c). Despite these developments and opportunities, the majority of European HEIs have made little progress in adapting their course offerings accordingly. Learning Management Systems are now standard in most institutions, but are mainly used as content repositories and, despite the fact that many institutions are experimenting with using MOOCs this remains a peripheral innovation. Despite the promise of digital technologies, the reality of them transforming education has not been realised and most pedagogical practices remain fundamentally the same (Conole, 2013).

Furthermore, it is estimated that 65% of jobs in the future do not even exist today (World Economic Forum, 2016), therefore we need to shift from knowledge recall to helping learners develop digital competences and enable them to be lifelong learners (OUA, 2018). Learners need to shift from being passive consumers to critical users and active producers of knowledge (Kelentric et al., 2017). The shift towards a more student-centred approach in teaching and learning within higher education is rapidly materializing across Europe. Recent technological developments can be instrumental in

supporting this movement. The growing numbers of students constitute a challenge when it comes to ensuring the quality and relevance of higher education. At the same time new providers are entering the market (Haywood, et al., 2015).

Teachers play a crucial role in teaching and learning but face the challenge of keeping abreast of the rapidly growing knowledge base in education (Merchie et al., 2018). Indeed, the role of educators is crucial in supporting the integration of digital technologies (Conrads et al., 2017). Education systems need to provide learners with adequate competencies to cope with social and professional realities. However, traditional educational systems are not best equipped to cope with the changing nature of learning, the changing demands of learners and their competencies and the need for new ways of teaching and managing complexities. The ‘renewed agenda for higher education’ report argues that having good university teachers is crucial for Higher Education (HE):

Too many higher education teachers have received little or no pedagogical training and systematic investment in teachers’ continuous professional development remains the exception. National and institutional strategies to improve career opportunities and rewards for good teachers are becoming more common but are far from standard (EAC, 2017, p.5)

## **Digital literacies**

As a result of the potential impact of digital technologies on education, new digital literacies are needed by teachers to make effective use of them for learning.

Open Educational Resources (OER) and Massive Open Online Courses (MOOCs) offer fantastic opportunities for opening up education and to potentially supporting social inclusion and widening participation. UNSECO argue that education is a fundamental human right and therefore should be freely available. Despite the rhetoric and the hype around OER and MOOCs in reality OER are not being used extensively by students or teachers and MOOCs are predominantly taken by those who are already educated. New digital literacies are needed to harness the potential of OER and MOOCs (Jenkins et al., 2006).<sup>1</sup> OER and MOOCs are examples of disruptive innovations as they are challenging existing educational provision, which is good, in that institutions need to think hard about and make clear what a student will get by attending that institution, and what their will their student

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<sup>1</sup> See also the JISC digital literacies resources: <https://www.jisc.ac.uk/guides/developing-digital-literacies>

experience will be. Jenkins et al. (2006) argue that learners need new forms of digital literacies to be part of what they refer to as today's participatory culture. They argue that a participatory culture is a culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one's creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices. A participatory culture is also one in which members believe their contributions matter, and feel some degree of social connection with one another (at the least they care what other people think about what they have created).

Forms of participatory culture include:

- Affiliations — memberships, formal and informal, in online communities centred around various forms of media, such as Friendster, Facebook, message boards, meta-gaming, game clans, or MySpace).
- Expressions — producing new creative forms, such as digital sampling, fan video-making, fan fiction writing, mash-ups, etc.).
- Collaborative Problem-solving — working together in teams, formal and informal, to complete tasks and develop new knowledge (such as through Wikipedia, alternative reality gaming, spoiling).
- Circulations — Shaping the flow of media (such as podcasting, blogging).

They list the following as the new set of skills that learners need to develop:

- Play — the capacity to experiment with one's surroundings as a form of problem-solving
- Performance — the ability to adopt alternative identities for the purpose of improvisation and discovery
- Simulation — the ability to interpret and construct dynamic models of real-world processes
- Appropriation — the ability to meaningfully sample and remix media content
- Multitasking — the ability to scan one's environment and shift focus as needed to salient details.
- Distributed Cognition — the ability to interact meaningfully with tools that expand mental capacities
- Collective Intelligence — the ability to pool knowledge and compare notes with others toward a common goal
- Judgment — the ability to evaluate the reliability and credibility of different information sources
- Transmedia Navigation — the ability to follow the flow of stories and information across multiple modalities
- Networking — the ability to search for, synthesize, and disseminate information
- Negotiation — the ability to travel across diverse communities,



discerning and respecting multiple perspectives, and grasping and following alternative norms.

- To this list I would add creativity.

As mentioned above a key challenge is that teachers and learners lack the necessary digital literacy skills to harness the potential of digital technologies. However, there is also inertia in existing educational structures and a hesitance to engage in new practices. For research-intensive institutions teaching is the poor sister, with research being privileged and rewarded. Furthermore, there is a lack of understanding and clarity of how to recognise learning through OER and MOOCs. Models are emerging, such as: digital badges, certificates of participation/completion, and recognition through organisations like the OERu, but these are still in their infancy. An IPTS commissioned report, OpenCred (Witthaus et al., 2016), looked at models for recognition of non-formal learning through MOOCs. Another barrier is around pedagogies. Firstly, most OER and MOOCs do not make the underlying pedagogy explicit. Secondly, it is not clear what pedagogies are most appropriate to support open learning. For OER work that I did with colleague found the following barriers to uptake: i) the pedagogies of OER were not clear, ii) the difficulty of repurposing, iii) the lack of clarity of perceived benefits, and iv) a culture of academics wanting to create their own resources.

#### Continuing Professional Development

New forms of Continuing Professional Development (CPD) are needed to enable teachers to adopt innovative practices and harness the potential of digital technologies. There is considerable literature on CPD and different perspectives on the nature of what works and why.

CPD can be defined as:

Formal courses and programmes in professional education and... the formal and informal development of professional skills that occur in the workplace, can refer to engagement with accredited modules or programmes, participating in workshops, presenting at a conference, or doing pedagogical research (National Forum for the Enhancement of Teaching and Learning in Higher Education, 2015).

#### **Darling-Hammond et al. (2017) define it as:**

Effective professional development is defined as structured professional learning that results in changes to teacher knowledge and practices, and improvements in student learning outcomes. Professional learning is conceptualised as a product of both externally provided and job-

embedded activities that increase teachers' knowledge and help them change their instructional practice in ways that support student learning.

Innovative case studies of CPD focus on effective use of digital technologies and innovative practice more generally to support CPD, such as for instance through MOOCs (Laurillard, 2016). However, understanding CPD is complex, contested and culturally rooted. There is a crucial link between teachers' pedagogical beliefs and their educational use of technology (Tondeur et al., 2016), which must be taken into account if CPD is to be effective and impactful. Faculty professional development is essential to ensure good quality teaching and learning. There are a variety of types of professional development; from formal courses and masters programmes, through to workshops, peer observation, mentoring, peer networking, the development of portfolios of professional practice and learning and teaching conferences (Gast et al., 2017; Wenner and Campbell, 2017). One of the most valuable means is learning from colleagues by engaging in informal conversations (Thomson and Trigwell, 2016). Conversation can be used for a variety of purposes, to: help teachers manage their teaching context, improve their teaching and student learning, reassure themselves about their teaching practice, discuss teaching related issues and problems and transform their thinking and practice of teaching. Coupled to this team-based professional development is increasingly being recognized as important (Gast et al., 2017). Finally, the literature indicates the importance of providing a supportive environment for CPD and opportunities for teachers to act as active agents in an authentic process of development (Jääskelä et al., 2017). In addition, it is recognized that it is important to reward teaching excellence and help build a community of peers (van Lankveld et al., 2017). Quality initiatives such as teaching awards, development grants and the establishment of centres of teaching excellence can also make a significant difference. Staff development is believed to help increase individuals' confidence in teaching ability and provide them with opportunities to connect with like-minded peers to exchange ideas, and to enable them to develop an educational language.

### **The 7Cs of Learning Design Framework**

When they design a learning intervention, teachers typically focus on content, drawing on their own experience of learning (usually through lectures and tutorials). The 7Cs framework shifts the focus away from content to activities and the ultimate learner experience. The underlying philosophy associated with the 7Cs framework is shifting from a belief-based approach to design to one that is design-based. It is about helping the

teacher/designer represent their designs, and fosters reflection and creativity. Visualising the design means that it can be shared and discussed with others.

Figure 1 illustrates the 7Cs of Learning Design framework. The first C, Conceptualise, is about creating a vision for the course or module being designed. It helps the teacher/designer think about the nature of the learners who are likely to take the course or module, their age range, diversity, characteristics, skills, perceptions and aspirations. It is also about articulating the core principles associated with the course or module. The next four Cs are concerned with designing the resources and activities that the learners will engage with. The Create C helps the teacher/designer articulate what learning materials need to be created, whether these are text-base, interactive materials, podcasts or videos. In addition, it covers the use or repurposing of Open Educational Resources. Finally, the teacher/designer might also create some activities, which require the learners to create their own content. The Communicate C is concerned with methods to facilitate communication, between the learner and the tutor, the learner and their peers, and the broader community through social media. This might range from effective mechanisms for fostering discussion in a forum, through effective moderation, or looser communication through social media. Similarly, the Collaborate C is about fostering mechanisms to enable collaboration or group work. Finally, the Consider C, is concerned with ways in which reflection and demonstration of learning achievements can be promoted. Assessment might be diagnostic, formative or summative. The Combine C enables the teacher/designer to step back and reflect on the design process to date and look at the design from different perspectives. Finally, the Consolidate C is about implementing the design in a real-life context and evaluating its effectiveness.

## The 7Cs of Learning Design

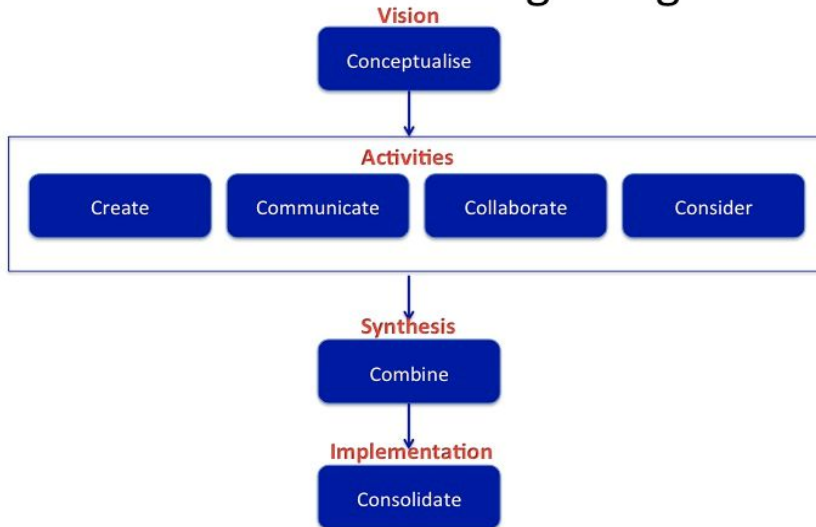


Figure 1: The 7Cs of Learning Design Framework

### Conclusion

This paper has argued that new forms of CPD are needed to help teachers design innovative learning interventions to help learners be critical problem solving and to enable them to be lifelong learners.

### References

- Conole, G., (2013), Designing for learning in an open world, in M. Spector and S.P. Lejoie (Eds.), Explorations in the Learning Sciences, Instructional Systems and Performance Technologies, New York: Springer.
- Conrads, J., Rasmussen, M., Winters, N., Geniert, A. and Langer, L., (2017), Digital education policies in Europe and beyond, JRC Science for policy report.
- Darling-Hammond, L., Hyler, M.E. and Garnder, M. (2017), Effective teacher professional development, a learning policy institute report, available online at <https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report>, last accessed 20st March 2018).
- EAC (2017), Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions on a review EU agenda for Higher Education.
- Eurydice (2017), Modernisation of Higher Education in Europe: academic staff – 2017, available online at

[https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Publications:Modernisation\\_of\\_Higher\\_Education\\_in\\_Europe:\\_Academic\\_Staff\\_%E2%80%93\\_2017](https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Publications:Modernisation_of_Higher_Education_in_Europe:_Academic_Staff_%E2%80%93_2017), last accessed 26<sup>th</sup> March 2018.

- Gast, I., Schildkamp, K. and van der Veen, J.T. (2017), Team-based professional development interventions in Higher Education: a systematic review, *Review of educational research*, Vo. 87, No. 4, 736-767.
- Grech, A. and Camilleri, A. F. (2017) *Blockchain in Education*. Inamorato dos Santos, A. (ed.) EUR 28778 EN; doi:10.2760/60649 ), a JRC Science for policy report, available online at [http://www.pedocs.de/volltexte/2018/15013/pdf/Grech\\_Camilleri\\_2017\\_Blockchain\\_in\\_Education.pdf](http://www.pedocs.de/volltexte/2018/15013/pdf/Grech_Camilleri_2017_Blockchain_in_Education.pdf), last accessed 20<sup>th</sup> March 2018.
- Haywood, J., Connelly, L., Henderikx, P., Weller, M. and Williams, K. (2015), *The changing pedagogical landscape report*.
- HoTEL (n.d.), HoTEL learning theories map, available online at <http://hotel-project.eu/sites/default/files/content-files/documentation/Learning-Theory.pdf>, last accessed 20<sup>th</sup> March 2018.
- Innovating Pedagogy Report (2017), Milton Keynes: Open University, available online at <http://www.open.ac.uk/blogs/innovating/> , last accessed 20<sup>th</sup> March 2018
- Jääskelä, P., Häkkinen, P. and Rasku-Puttonen, H. (2017): Supporting and constraining factors in the development of university teaching experienced by teachers, *Teaching in Higher Education*.
- Jenkins, H., Clinton, K., Purushotma, P., Robison, A.J. and Weigel, M. (2016), *Confronting the challenges of participatory culture: media education for the 21<sup>st</sup> Century*, available online at [https://www.macfound.org/media/article\\_pdfs/JENKINS\\_WHITE\\_PAPER.PDF](https://www.macfound.org/media/article_pdfs/JENKINS_WHITE_PAPER.PDF).
- Kelentric, M., Helland, K. and Arstorp, A-T. (2017), *Professional digital competence framework for teachers*.
- Laurillard, D. (2016). The educational problem that MOOCs could solve: professional development for teachers of disadvantaged students. *Research in Learning Technology*, 24(1), 29369.
- Lawrence, J.E. and Tar, U.A. (2018): *Factors that influence teachers' adoption and integration of ICT in teaching/learning process*, Educational Media International,
- Merchie, E., Tuytens, M., Devos, G. and Vanderlinde, R. (2018) *Evaluating teachers' professional development initiatives: towards an extended evaluative framework*, *Research Papers in Education*, 33:2, 143-168.
- NMC Horizon report (2017), 2017 Higher Education Edition, available online at <https://www.nmc.org/publication/nmc-horizon-report-2017-higher-education-edition/>, last accessed 20<sup>th</sup> March 2018.
- OUA (2018), *Open Universities Australia Higher Education Marketing*

- Opportunities Overview, Edition 2, Melbourne: Open Universities Australia.
- Patton, M. Q. (2008). Utilization focused evaluation. Saint Paul, MN: Sage.
- Scott, C.L. (2015a), The futures of learning 1: why must learning content and methods change in the 21<sup>st</sup> Century? Education, research and foresight working papers, available online at <http://unesdoc.unesco.org/images/0023/002348/234807E.pdf>, last accessed 26<sup>th</sup> March 2018.
- Scott, C.L. (2015b), The futures of learning 2: what kinds of learning for the 21<sup>st</sup> Century? Education, research and foresight working papers, available online at <http://unesdoc.unesco.org/images/0024/002429/242996e.pdf>, last accessed 26<sup>th</sup> March 2018.
- Scott, C.L. (2015)c, The futures of learning 3: what kinds of pedagogies for the 21<sup>st</sup> Century? Education, research and foresight working papers, available online at <http://unesdoc.unesco.org/images/0024/002431/243126e.pdf>, last accessed 26<sup>th</sup> March 2018.
- Teaching and Learning National Forum for the enhancement of teaching and learning in Higher Education (2015), Mapping CPD pathways
- Thomson, K.E. and Trigwell, K.R. (2016): The role of informal conversations in developing university teaching?, Studies in Higher Education
- Tondeur, J., van Brank, J. and Ertmer, P.A. (2016), Understanding the relationship between teachers' pedagogical beliefs and technology use in education: a systematic review of qualitative evidence, Education Tech Research Dev, 65: 555-575.
- van Lankveld, T., Schoonenboom, J., Volman, M., Croiset, G, and Beishuizen, J. (2017) Developing a teacher identity in the university context: a systematic review of the literature, Higher Education Research and Development, 36:2, 325-342,
- Wenner, J.A. and Campbell, T., (2017), The theoretical and empirical basis of teacher leadership: a review of the literature, Review of educational research, Vol. 87, No. 1, 134-171.
- Witthaus, G., Inamorato dos Santos, Childs, M., Tannhauser, A-C., Conole, G., Nkuyubwatsi, Punie, Y., (2016), Validation of non-formal MOOC-based learning: an analysis of assessment and recognition practices in Europe (OpenCred), a JRC Science for policy report, available online at [http://publications.jrc.ec.europa.eu/repository/bitstream/JRC96968/lfn2766\\_0enn.pdf](http://publications.jrc.ec.europa.eu/repository/bitstream/JRC96968/lfn2766_0enn.pdf), last accessed 20<sup>th</sup> March 2018.
- World Economic Forum (2016), The future of jobs and skills, available online at <http://reports.weforum.org/future-of-jobs-2016/chapter-1-the-future-of-jobs-and-skills/>, last accessed 21<sup>st</sup> March 2018.

## INTERCULTURAL LEARNING ENVIRONMENT IN “AUREL VLAICU” UNIVERSITY

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**Abstract:** *This article seeks to present a few general directions in creating an intercultural learning environment in Higher Education Institutions, with exemplifications from “Aurel Vlaicu” University from Arad. Why? Because Arad City is a multicultural town, our region is in fact a multicultural areal and our students belongs to this county. On the other hand, in the “Aurel Vlaicu” University there are Erasmus+ students from different countries who also bring the nuances of their cultures that interact with ours.*

**Keywords:** *multiculturality; interculturality; intercultural learning environment; HEI;*

### Introduction

Arad, a city situated in the Western part of Romania, with 162,450 inhabitants, with the share of the female population 53.5% (86849 women) and the male population 46.5% (75601 males), is a multicultural town. In Arad City, the capital of Arad County, there are 78.8% Romanian, 9.7% Hungarian, 0.8% Germans, 1.6% Gypsies, and 9.2% other ethnics groups. From the confessions point of view there are: 68.4% Orthodox, 9.4% Roman-catholic, 2.5% Reformat, 0.8% Greek-catholic, 4.3% Pentecostals, and 14.6% other confessions (Toth, 2013).

Arad hosts two universities, a public and a private one, where students from all parts of Romania and from other countries study.

Our University, a public one, named “Aurel Vlaicu” after the pioneer of Romanian flight, enroll more than 10,000 students of different ethnics, confessions and gender, from Romania and from abroad (Republic of Moldavia, Hungary, Serbia) and also host Erasmus + students from Turkey, Portugal, Spain etc. In other words, it is also a multicultural one, like the areal in which it has developed. Those students bring the nuances of their cultures and try to share it and to interact with ours.

In these conditions “Aurel Vlaicu” University has the duty to offer an intercultural learning environment to the students, academics and clerk. Can it?

## **Theoretical background**

Motto:

*“People learn best when they feel part of a learning community.”*

“Aurel Vlaicu” University of Arad, one of 55 Romanian State Universities (and other 46 private Universities) \* is called, like any other university, to meet both general and particular requirements to provide an intercultural learning environment, appropriate to a society in globalization.

In this conjuncture, all Higher Education Institutions (HEIs) have the following objectives:

- a. To create integrated environments where students of cultural minority backgrounds are not expose to racism and/or discrimination;
- b. To actively promote inclusive and interactive teaching technique and research practice;
- c. To address the curriculum needs of all those attending Higher Education;
- d. To encourage universities’ managers to implement policy changes that promotes intercultural learning.

Creating intercultural environments means working in a way that is participatory, experiential and relevant to the interests and energies of the people who are in the room. Therefore, working interculturally involves being open to processes of education where educators and learners work together to learn and thus different ways of knowing are valued in this context.

Any intercultural setting should be one where university staff also grows as part of the process.

In international literature it’s mentioned that developing intercultural learning environment in Higher Education Institutions involves adopting certain guidelines across three distinct categories:

- 1. Reflections on each cultural identity and the assumptions it holds*
- 2. Teaching, learning and research methods.*
- 3. Wider institutional practices and supports*

### *1. Reflections on each cultural identity and the assumptions it holds*

The most important guideline involves critical reflection on our own cultural and ethnic identity. This includes being open to accepting the prejudices we hold.

How to do that:



- Reflect on our own worldview and think about how we interpret our own cultural identity;
- Appreciate the multiplicity of our own identities;
- Think about the culturally bound assumptions that shape our interactions with others;

Reflective questions could be:

- a) What privileges do I hold (ethnicity, confession, gender, class, race etc.) and what power does this give me?
- b) How the life-experiences of my students shape their engagement in the university structures?
- c) How do I like to be included where I represent a minority culture?

## 2. *Teaching, learning and research methods.*

Education should be problem-posing rather than solution-giving. This means that the role of the educator/facilitator is not to deliver answers, but to facilitate people to step-back from and analyse their own lives so they can decide themselves how best to respond.

Thus, in order to meet these requirements, adopting inclusive and interactive teaching, learning and research methods have to be a normal way in education in this global world.

In this context HEIs must to be aware about:

- *The use of language* – The most important is to appreciate that language is always evolving and that people should feel free to self-determine their identity rather than be led by the perceptions of others.
- *Implementation with determination the interactive teaching & learning methods* – Thus imply creating conditions where students from a variety of backgrounds (social class, gender, ethnicity, confessions, culture etc.) are equally valued and where diversity of experience is recognised and actively incorporated into the learning process.

Talking openly about interculturalism brings diversity alive and reveals a multitude of experiences and perspectives.

For teaching staff (academics), some specific guidelines to guide this approach are:

- ❖ Deliberately create opportunities for meaningful cooperative interactions amongst members of different cultural groups;

- ❖ Create spaces for students from cultural minority backgrounds to contribute to knowledge creation by sharing their experiences and perspectives;
  - ❖ Ensure reasonable assessment of learning for students of different cultural groups by using alternative methods of assessment outside of the written papers. (Moore & Hampton, 2015).
- *Curricular changes* – Inclusive higher education involves being open to making curricular changes to course materials. These can consist of:
- Ensure that when relevant, curriculum incorporate information about specific cultural groups;
  - Ensure that course materials question racialized stereotyping;
  - Presentations (e.g. PowerPoints, Prezi etc) should draw from images that reflect cultural diversity as the norm. They should also reflect diversity of gender, age, ethnicity, confessions, race etc.
  - Case-studies and other scenarios should incorporate diversity through such things as the names and the gendered roles given to characters.

### 3. *Wider institutional practices and supports.*

Creating intercultural universities isn't simply about making changes to certain subjects and programs. It is also not simply about changes to the physical environment such as visual displays of diversity, it should be embedded in the practices that inform all aspects of university life.

Higher Education Institutions (HEIs) can relay a message of equality, inclusion and integration to those who attend; both students and visitors. In order to achieve this, some specific guidelines could be:

I. *Adherence to Institutional policies on integration* – A good starting point is to find out what policies already exist in institutions as, sometimes, staff are unaware of existing policies and recommendations within their own place of work. Where policies are absent, university staff should work to create these policies, ensuring they are in line with national and international recommendations. This could involve creating an institutional working group to develop policy positions and encouraging institutions to organise workshops in inclusive practice.

II. *The physical and social environment*

- ✓ HEIs should actively support the development of student societies
- ✓ Institutions should provide quiet spaces that all students have access to.
- ✓ Institutions should ensure a variety of culinary options that are sensitive to religious and cultural differences.
- ✓ Institutions should ensure appropriate and accessible signage that reflects language diversity.

III. *Recognition of International Qualifications and Recognition of Prior Learning* - The European Commission requires each HEI to have policies in place on the recognition of both formal and non-formal prior learning. All staff should be familiar with who is responsible for these policies so students can be advised accordingly.

IV. *Responding to discrimination and racism* – Sometimes discrimination results from “deficit notions” about ethnic or confession minority students or migrant students where, without being consciously aware of it, educators can think of migrant, ethnic or confession students as in some way deficient (Acquah & Commins, 2016).

To accomplish all these points, HEIs must be very open to all the facts of this world, in a continuously movement, change and transformation and be determined to apply it.

### **Fingerprints of these concepts in “Aurel Vlaicu” University**

It is obviously that “Aurel Vlaicu” University tries to follow the general objectives for an intercultural learning environment, in a Romanian cultural manner. As we got to know, the general objectives are as it is shown:

1. To create integrated environments where students of cultural minority backgrounds are not exposed to racism and/or discrimination;
2. To actively promote inclusive and interactive teaching technique and research practice;
3. To address the curriculum needs of all those attending Higher Education;
4. To encourage universities’ managers to introduce policy changes that promotes intercultural learning.

We can show how these objectives are realized into our University, analysing them, one by one:

1. In „Aurel Vlaicu” University (UAV), Hungarians, Germans, Serbians, Slovaks etc. being Orthodox, Catholics, Protestants or Agnostics, study together with Romanian students and they are not in any way discriminated! They attend together the learning activities and the practices with the same rights and the same obligations. All academic staff look at their students with empathy, with respect and responsibility. There are also a few Erasmus+ students from Turkey, Portugal... who are familiarised with the Romanian learning system and UAV practices.
2. The academic staff from UAV, following diverse trainings in university didactics/methodology is in the position to deliver interactive and integrate courses, seminars and laboratory activities to improve the learning and the research abilities of the students, without discrimination of ethnicity, confession, race or gender.
3. Generally speaking, our curricula is designed for the needs of our labor market and supervised by internal and external evaluator – The Romanian Agency for Quality Assurance in Higher Education (ARACIS), full member of the European Association for Quality Assurance in Higher Education (ENQA). The goals of our curricula are to accomplish employers' requirements (competencies) and for this aim we work for enhancing the learning outcomes of graduated students.
4. University's managers – Rector, Vice Rectors, Deans and Directors – being open minded to the internationalization of the University, try to introduce policy changes that promote intercultural learning at all level of academic and administration.

If in the theoretical part was mentioned that developing intercultural learning environment in Higher Education Institutions involved adopting certain guidelines across three distinct categories:

1. *Reflections on each cultural identity and the assumptions it holds*
2. *Teaching, learning and research methods.*
3. *Wider institutional practices and supports*

we can share some peculiar facts related with our University:

1. *Reflections on each cultural identity and the assumptions it holds* – in this direction, at the University level, there is a tradition of 10-12 years in organizing and unfolding the International Interdisciplinary Summer School “Communication and Interculturality”, in which the values of the culture of the participants are emphasized and there are workshops realized. During three days of intense activities there are a lot of moments that lead to reflection on our own worldview and thinking about how we interpret our own cultural identity, but, at the same time, in a continuous relation with another culture, with other cultures. Participants from abroad (Moldavia Republic, Ukraina, Serbia, Hungary, Italy, UK, Germany etc) and from other Romanian Universities have a huge input by their presentations. On the other hand, it is a provocative modality for thinking about the boundaries caused by less educated people into intercultural way.

At the level of Faculty of Educational Sciences, Psychology and Social Work there is another traditional event, beginning with 2005, Annual Workshop “Interculturality in contemporary World” which agglutinates effort of the students from master and bachelor study programs. The workshop aims to put the students to think about the culturally bound assumptions that shape their interactions with others. In this workshop the students work together in different kinds of methods like Future Creative Workshop, World Café, Carpatia Role play, Balint group or Future Search Conference, all in the benefit of intercultural learning because the content is around culture, all kind of cultures - theonomous and autonomous.

2. *Teaching, learning and research methods.* The first important thing in cultural communication is the language used by professors and students, which must be adequate of evolving of the culture.

Firstly, the mother tongue and, immediately next, an international one. In different situations of teaching, learning and evaluation there are different kind of students autochthonous and/or foreigners. The first barrier between cultures is language! For this reason many of our professors and students have the capability to speak correctly the Romanian language and another modern language (English, French, Spanish, and German). It is true that there is a lot of work to be done in this direction but if we want to be chosen by the foreign students we must improve in one foreign language, at least.

The second important thing is that in our University there are conditions for equally treated the students from a variety of backgrounds (social class, gender, ethnicity, confessions, culture etc.) into the learning process, where diversity of experience is recognised and incorporated in an interactive learning methods. Thus professors create opportunities for meaningful cooperative interactions amongst members of different cultural

groups in their education activities, both formal and non-formal, for sharing their experiences and perspectives. Also academics use alternative methods of assessment like e-portfolio, online questionnaire, observation sheets etc. for students of different cultural groups.

The third important thing is that in our University sustained efforts are made to adapt and update the curriculum to the needs of intercultural society. For example, at the Faculty of Educational Sciences, Psychology and Social Work, there are such preoccupations in this domain, by the proposal of Intercultural education or Intercultural learning courses, at the bachelor level and the master's degree level. In these courses, the curriculum incorporates information on specific cultural groups (ethnics, confessions, gender etc) and ensures materials that question the stereotypes and at the same time proposing very opened debates and panel discussions about discrimination, prejudice or racism.

It's true that there are many things to be done better in the field of research of interculturality, both at the University and at the Faculties level.

3. *Wider institutional practices and supports* – concerning the requirements of this line, the “Aurel Vlaicu” University as a Higher Education Institution, must relay a message of equality, inclusion and integration to those who attend it, both students and visitors, but it has to make more improvements in this respect. Why do I say that?

Because the staff are unaware of existing policies and recommendations within their own place of work related to the adherence to Institutional policies on integration. In this condition, the university staff should work to create these policies ensuring that they are in line with national and international recommendations. This could involve creating an institutional working group to develop policy positions in inclusive practice.

Secondly, although the University actively supports the development of student society (encouraging the Students' league and their activities) and ensures enough spaces that all students have access to, it isn't sensitive to ensure a variety of culinary options for difference cultural groups or not provide appropriate and accessible signage that reflects language diversity.

But, from another point of view, the academic staff of our University is prepared to respond to discrimination, results from “deficit notions” about ethnic or confession minority students. They all have respect of diversity and responsibility for each human been.

Whilst the European Commission requires each HEI to have policies in place on the recognition of both formal and non-formal prior learning, our University is not prepared for the second one. It's true that, generally speaking, no University from Romania is prepared for this thing.

## Conclusions

Higher Education Institutions must accomplish some specific guidelines and objectives into the global society for being and offering an intercultural learning environment.

From this point of view “Aurel Vlaicu” University of Arad tries to be in this trend, where creating intercultural environments means working in a way that is participatory, experiential and relevant to the interests and energies of the academic staff and students who are under the same roof.

Thinking and working interculturally means being open to the processes of education where academic staff and students work together to learn, sharing learning situations and winning learning experiences and thus different ways of knowing are valued in this context.

And we can conclude now that an intercultural setting should be one where academic staff and students grow as part of the process, contributing as well to organization's culture.

## References

- Acquah E.O, Commins, N. L., (2016), International students' perspectives of a diverse class on multiculturalism, in *Journal of Further and Higher Education*, 29 Sept. 2016, pp 1-12, <http://dx.doi.org/10.1080/0309877X.2016.1224328>
- European Union (EU), (2004), *Common Basic Principles* [http://www.eesc.europa.eu/resources/docs/common-basic-principles\\_en.pdf](http://www.eesc.europa.eu/resources/docs/common-basic-principles_en.pdf), accessed at 27-th April, 2018
- Moore, P., Hampton, G., (2015), “It’s a bit of a generalisation, but...: participant perspectives on intercultural group assessment in higher education”, *Assessment and Evaluation in Higher Education*, 40 (3), 390-406.
- Toth, G., (2013), Studiu de fundamentare privind evoluția socio-demografică, Actualizare Plan Urbanistic General Municipiul Arad. Primăria Arad.
- \*ARACIS (The Romanian Agency for Quality Assurance in Higher Education), (2017), HEIs Statistics, Bucharest

# **CHILD ABUSE IN IGBOLAND OF NIGERIA: EXPLANATIONS, PSYCHOLOGICAL IMPLICATIONS AND ENDING THE SILENCE**

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**Key words:** *child abuse; Igboland; family; prevention;*

## **Introduction**

Child abuse is as old as man. It happens in different parts of the world. Some countries, cultures and governments are advanced in handling the problem, while others are just waking up to the reality. However, that does not mean that children are not harmed in those societies where the government is still silent. Even though the statistics data from United Nations Children's Fund (UNICEF) and World Health Organization (WHO) vary from city and city, from country to country, and from year to year, what is not in dispute is that child abuse is an international problem. Children are abused regardless of the culture, society, or socio-demographics of the individual child (Bekerian & Levy, 2012, 68).

In the past fifty years, the issue of child abuse was not a topic of discussion in Igboland of Nigeria. Though the Igbos are noted for their love for children. It is interesting to note that some parents and teachers in disciplining the children go to the extreme and put the children in harmful situations. Hence, the devastating effects of child abuse have called the attention of psychologist, scholars and government. Today it is becoming an important issue of awareness. To achieve this uphill task, all hands need to be on deck to tackle the serious nature of this ugly phenomenon. This leads to a serious discussion on the prevention of child abuse.

Preventing child abuse before it occurs in the family, school or in the society is the fundamental goal of reducing the occurrence of child abuse. In fact, most authors, psychologist and experts in the file of child abuse and maltreatment agree that, policies, strategies and programmes for preventing child abuse must aim on preventing child abuse before it happens. To achieve this goal, there are programmes that aims in improving the parenting skills. These programmes are designed to help parents develop a positive,

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healthy and secure attachment with their children (Miller-Perrin & Perrin, 2007, 104). If parents understand the child's development they will know why the child comports or acts in certain manners.

## **1. Definition and Concept of Child Abuse**

Child abuse is made up of two words and it will be important that we first understand the meaning of the two words and then make an attempt in defining child abuse.

The definition of a child varies from one school of thought to the other. The reason is that some writers, intellectuals and professors are sometimes influenced by their culture and religious beliefs. Therefore, this constitutes a big problem in determining when childhood begins and end. This article retains that a child is a person experiencing the period of development from infancy to puberty (Rathus, 2014, 4).

Again, there is an on-going debate on the definition of abuse. Nevertheless, many authors prefer to use this definition. Abuse is treating another person in a harmful, injurious, or offensive way (Davis, 2011, 65).

Having clarified the two words, let us try to define the term child abuse. It is worth mentioning that people's environment and cultural background determines the way they perceive the issue of child abuse. This makes the issue to be a bit complicated. The complexity of child abuse has drawn the attention of different scholars from different areas of life. It is of interest to note that disciplines like psychology, sociology, psychiatry, paediatrics, education, social work, law enforcement have attempted to give a definition of child abuse based on their background and orientation.

Notwithstanding the disagreement on the definition of child abuse, we would like to go with this definition. Child abuse is any form of physical, mental injury, or sexual abuse or exploitation, negligent treatment, maltreatment, or cruelty towards a child by a parent or other adult (including all those that are responsible for the child's welfare), causing significant harm to its victim (Colman, 2009, 129). One thing that is common in most of the definitions of child abuse is that they talk about the child, the person that abuses the child and the damage that was inflicted on the child who is considered as a casualty.

This definition brings to light what some children are passing through in Igboland. It is unfortunate that when an African (Nigeria) child and in particular reference to Igbo children is mentioned, what comes to some people's mind is poverty, sickness, etc., forgetting the aspect of child abuse. Unfortunately, child abuse exist in Igboland of Nigeria and seems to be receiving little attention from the government, scholars and few psychologist around the town.

In Igbo society, the child is loved, esteemed, valued, and treasured. They cherish a child more than having money. In fact, for the Igbos, nothing is comparable to a child. This is reflected in many personal names of the Igbo, such as: *Ifeyinwa*, there's nothing like a child, *Nwakaego*, a child is better than wealth, *Nwabueze*, the child is king and 'Nwabu-uwa', meaning a child is all the world to me. Children as seen as cherished assets of the family. In the Igbo man's world, numerous proverbs and sayings are continually used in everyday situations to describe the joys of having children and the sorrows of childlessness. This shows the importance of children in marriage and indeed among the Igbo (Okuma, 2009, 125).

Since the child is regarded as one of the greatest valuable asset in Igboland, the parents, adults and the Igbo society take training of their children very seriously. In the families, parents discipline the children to straighten them up while in the school's children are disciplined by their teachers. Normally, the teachers discipline the students by flogging them. Sometimes, the children are asked to kneel down on the floor on their bare knees. Again, there are cases where these children are whipped on their buttocks, backs and hands.

It is true that in Igbo society, the parents pay attention to the discipline of the children. Unfortunately, many Igbo parents do not know the difference between child training, child discipline and child abuse. It is natural for a child to expect a correction from the parents when he or she fails an assignment or but the contrary is the case with regards to abuse. Child abuse is unpredictable and injures the child. In fact, there's a big difference between discipline and abuse.

Discipline is given in a direct response to a person's actions. In this case there's an identifiable cause to discipline the child. The goal of discipline is altered behaviour and a change in the way a person responds to life. Discipline is an act of love by the parent or anyone in charge of the child and it is rooted in desire for the child to be the best he or she can be. Abuse, on the other hand, is frequently unrelated to a child's behaviour. The innocent action of the child who is considered as a victim may trigger a violent response in an abuse. The person who is abusive has an inner predisposition to abuse. Abuse seeks to do a victim harm and is based on manipulative and control of power (Stanley, 1994, 61).

In Igbo society, some parents educate their children with strict rules. They punish their children at any slightest mistake without hearing from them. Sometimes, parents slap their children when they want to explain the reason why they did not carry out the instructions given to them. In a nutshell, the Igbo parents believe in this famous proverb, '*spare the rod spoil the child*'. This proverb means "if a person is not punished for doing wrong, more often than not, that person ends up spoiled" (Berina, 2010, 16).

However, some parents and teachers go to the extreme and put the children in harmful situation.

## **2. Types of child abuse**

Children experience different forms of child abuse in different situations. In fact, there are different types of abuses but this article retains that there are four types of abuses and they include the following; physical abuse, sexual abuse, psychological abuse and child neglect.

*Physical abuse:* Defining physical abuse can be very challenging and demanding because some cultural beliefs, values and environment tend to spur the use of physical punishments by parents, caregivers and elder siblings towards the children. The *Diagnostic and Statistical Manual of Mental Disorder DSM-5* describes child physical abuse as “a nonaccidental physical injury to a child- ranging from minor bruises to severe fractures or death-occurring as a result of punching, beating, kicking, biting, shaking, throwing, choking, hitting (with a hand, stick, strap, or other object), burning, or any other method that is inflicted by a parent, caregiver, or other individual who has responsibility for the child. Such injury is considered abuse regardless of whether the caregiver intended to hurt the child. Physical discipline, such as spanking and paddling, is not considered abuse as long as it is reasonable and causes no bodily injury to the child” (American Psychiatric Association, 2013, 717).

Unlike the other types of child abuse, the signs and symptoms of physical abuse of a child is easily detected because of the marks on the body and the appearance of the child in question. In some cases, it is obvious to see cigarette burns on the child’s palms, soles of feet or abdomen; bruises on the face, upper arms, buttocks, thighs or lower back, punch and slap marks, broken bones, bruises, black eyes, injuries and signs that the child does not receive medical care for the injuries.

In Igboland, parents believe that disciplining a child will help the child to become a good and responsible person. Their aim in disciplining them is for their child to be stable and be good ambassadors wherever they find themselves in the future. Regrettably, they sometimes cross the margin between discipline and enter into the territory of abuse.

*Sexual abuse:* “Child sexual abuse encompasses any sexual act involving a child that is intended to provide sexual gratification to a parent, caregiver, or other individual who has responsibility for the child. Sexual abuse includes activities such as fondling a child’s genitals, penetration, incest, rape, sodomy, and indecent exposure. Sexual abuse also includes noncontact exploitation of a child by a parent or caregiver-for example, forcing, tricking, enticing, threatening, or pressuring a child to participate in

acts for the sexual gratification of others, without direct physical contact between child and abuser” (American Psychiatric Association, 2013, 717).

Literally speaking, the possible effects of child sexual abuse include pregnancy and sexually transmitted infection. In some cases, stains of blood on the legs or the child’s underwear. Some children after the ugly experience, find it difficult to walk, sit down or urinate. Some have pain or itching, in the genital area or bite marks to thighs and genital area.

In Igboland, some average or rich families employ the children from poor families as domestic helpers. It’s unfortunate that some of these children are victims of these very ugly phenomenon. When they cannot bear it any longer, they ran out of the house and end up in the streets where they are exposed to commercial sexual exploitation. The majority of the children that run out of the house are girls and they end up as hawkers in order to survive. Again, some of these children especially the girls among them are sexually abused by individuals who are old enough to be their parents.

*Psychological abuse:* psychological abuse is a concerted attack on a child's development of self and social competence, a pattern of psychically destructive behaviour which consists of five forms: rejecting, isolating, terrorizing, ignoring and corrupting (Garbarino, Gutman and Seeley cit. in. Kay, 2003, 33). In 2013, DSM-5 presented a classical definition of child psychological abuse stating that “Child psychological abuse is nonaccidental verbal or symbolic acts by a child’s parent or caregiver that result, or have reasonable potential to result, in significant psychological harm to the child” (American Psychiatric Association, 2013, 719).

The sign of child psychological abuse seems to be more difficult to detect than other types of abuse. Whereas the physical and sexual abuses involve harming or marring the body of the child, in psychological abuse the child’s spirit is being touched and harmed. Sometimes it may include the deprivation of love, stimulation and security. The possible signs of psychological abuse are most likely found when a child begins to display loss of self-confidence or self-esteem, depression, social withdrawal or loss of interest/enthusiasm for things that a child previously enjoyed etc.

In Igboland, there is mutual respect for each other but a lot has to do with respect for parents and elders. This respect for parents, adults and those in authority can be seen in the way children listen to them and carry out the daily activities as directed by them. On the contrary, some parents in disciplining their children go to the extreme by shouting, scolding, insulting their children without paying attention to the psychological effect. These are some of the common insulting words that parents use often; *Onye’ ala-* Mad person, *Onye ime- ezi-* Bush person, *Onye Nzuzu-* Stupid person etc. These words have an effect on the psychological development of the child.

*Child Neglect:* “Child neglect is defined as any confirmed or suspected egregious act or omission by a child’s parent or other caregiver that deprives the child of basic age-appropriate needs and thereby results, or has reasonable potential to result, in physical or psychological harm to the child. Child neglect encompasses abandonment; lack of appropriate supervision; failure to attend to necessary emotional or psychological needs; and failure to provide necessary education, medical care, nourishment, shelter, and/ or clothing” (American Psychiatric Association, 2013,718).

Child neglect in Igboland come from parents and people who are responsible for the child’s well-being. In Igboland, those who are responsible for the children includes the parents, teachers, relatives and neighbours of the child in question. Neglect can be seen in form of malnutrition, poor living conditions, inadequate health care, lack of adequate clothing etc.

In the past in Igboland, the man goes out to work while the woman stays at home and takes care of the children. Presently, the situation is no longer the same. Both the man of the house and the woman go to work in their respective areas of work. Sometimes, they do not provide the child with his or her basic needs. It is unfortunate to state that some parents in Igboland are not aware that neglect leads to significant poor psychological and educational outcomes for their children. Hence, we can summarise this point by stating that child neglect is the failure of the parent or the caregiver to provide the basic amenities for the child which comprises of physical neglect, medical neglect, educational neglect, supervisory neglect, and emotional neglect.

### ***2.1 Major causes of child abuse***

Child abuse happens in different homes in Nigeria- Igboland where the risk factors tend to be high. Child abuse can be caused by a number of factors. However, this article will focus attention on few major causes of child abuse. Knowledge of the causes of child abuses will help parents and those responsible for children in Igboland to know when something is going wrong with the child and equally to know the boundaries between child discipline and child abuse.

*Poverty and stress:* Poverty is “a lack of resources required to meet an individual’s or a family’s needs” (Ranyard, 2017, 422). Poverty most of the time helps in building an unhealthy home which hinders the development of a child. In fact, it retards every sphere of social, physical, emotional and psychological life of a child.

In an environment where poverty has become a culture of its own, parents and adults are likely to become overwhelmed by stress. We are not trying to prove the fact that many parents under a great deal of stress abuse their children. Instead, we want to reiterate the point that the stresses of

poverty lead to child abuse. Still on this point, we would like to state that stress is something that is subjective. What someone considers as a stressful activity or phenomenon may not be the same for the other person. Nonetheless, the bottom line is that some parents do not know how to cope when they are stressed out and as such they pass their anxiety and stress on to their children.

*Serious marital problems:* There are so many reasons which causes serious family instability, take for instance; economic situation, extra marital affairs, lack of trust, religion, infertility of the wife etc. These factors can lead to a separation of the couples or divorce. It is interesting to note that children at this point bears the consequences of the unresolved conflicts of their parents. “Family circumstances, most notably conflict and marital violence, also have a causal connection to child maltreatment. Tragically, not only do marital violence and family turmoil frighten and disturb children in a direct manner, but the resulting fallout from these events, ranging from changes in financial status and living quarters to loss of family unity and safety prolongs the stress and thus the harmful impact on children’s development” (Mash & Wolfe, 2016, 417).

*Unwanted pregnancy:* When a child is not accepted by the parents or one of them, there is the possibility of the child experiencing poor parenting and even child abuse. This goes contrary to the attachment theory of Mary Ainsworth and John Bowlby in the world of psychology. “The parent’s sensitivity to those cues and signals is an important pathway to a secure parent-child attachment and the child’s subsequent competence and well-being. Sensitivity includes identifying, interpreting, and responding appropriately and consistently to the baby’s cues” (Sameroff, McDonough & Rosenblum, 2004, 225).

Unfortunately, when some mothers give birth to a baby that she did not want at the time of conception, they fail in the aspect of mother-child relationship especially in terms of their social, emotional and cognitive development. Most of the time, they abuse these innocent children.

*Unemployment:* Globalization has changed most of the lifestyle of the ordinary man and woman in the world. In fact, the impact of globalization has tremendous effects on the masses. We have both the positive and negative effect. However, unemployment is considered as a fruit of globalization and many couples are searching for jobs because they need to maintain and sustain their families. “Unemployment per se, is probably not the variable that directly elicits abusive behaviour. It appears to be the concomitant stresses, or functions of unemployment, which lead to abusive acts. Several reasons are proposed in the literature. Unemployment may be associated with financial strain; an unemployed father is home for longer

periods of time, thereby increasing the possibility for conflict between father and child” (Childs & Melton, 2012, 315).

## ***2.2 Attitude that encourages Child Abuse in Igboland of Nigeria***

There are different behaviours that are being put up by a good number of people at different times and different places, intentionally or unintentionally. People can sometimes conceal their attitudes or even be unaware of their attitudes. In Igboland, there are certain attitudes which encourages child abuse. Some of these attitudes have lasted for a long time in the society without any criticism and as such it seems like a tradition. Below are some of the attitudes that is consistent in the Igbo society.

*Acceptance of the use of physical punishment:* The term physical punishment is associated with the phrases such as corporal punishment, physical punishment and physical discipline. These phrases are used interchangeably and they “refer to the correction or punishment of a child's behaviour through the deliberate or ill-considered infliction of body pain, however minor or intense” (Freeman, 2014, 158).

In Igbo society, some parents still uphold that physical punishment is one of the means of disciplining a child. It is a popular opinion among some parents that it is necessary to smack a naughty child. It is true that these physical punishments are carried out by Igbo parents with the intention of correcting their children but the problem at stake is that sometimes it ends up inflicting the child with a serious injury. Sometimes, the parents that were seen as not punishing their children physically are considered as weak parents. In fact, some believe that they are spoiling their children.

“The Igbo family, and, in general, the Nigerian family, discourages and prohibits acts likely to bring disrepute to the family. As a result, severe physical punishment is meted out to the young offenders in the hope that this will serve as a deterrent” (Offohia & Sadiku, 1996, 79). It is obvious that physical punishment aggravates and leads to child abuse. Though it is a welcome attitude by some parents in Igboland. However, that does not justify the means.

*Acceptance of child hawking:* Poverty is a notable factor that has contributed strongly to child hawking in Igboland. In fact, “due to the poor socio-economic status of some parents, they send their children into hawking in order to make both ends meet. Children are now the ones making money for their school fees and their welfare. When a child goes to hawk food items early in the morning before going to school or as soon as he comes back to school, it seriously affects his academics. These are the children that come to school weak and tired and in most cases they are always the ones dozing in the class. In such cases education becomes a ceremonial instead of being a

right. A child's human dignity is affected when he is subjected to such treatment" (Emezue, Kosch & Kangel, 2014, 98).

In Igbo society, it is worrisome and alarming that some parents accept the idea of sending their children especially the girls to hawk. Although one can argue that the economic factor and many other factors like war, illiteracy, religion, poor family planning can induce parents into involving their children into this very act. However, this despicable phenomenon and experience has a horrendous effect on the developmental process of the child.

Child hawking has many consequences for the child. It has a physical, psychological and social consequence for the child. Apart from the stress, fatigue, depression, anger that the child undergoes, it equally exposes the child to unwanted pregnancies, prostitution, smoking, robbery, truancy and poor academic performance.

*Acceptance of child or early marriage:* "Child marriage, also known as early/forced marriage is the practice of coercing, deceiving or forcibly giving out a child into marriage at such an age when he or she is incapable of understanding the nature of marriage, as to give free, full or informed consent to it and is physically- anatomically, physiologically and psychologically- emotionally, spiritually and mentally, immature for marriage" (Ukwuoma, 2014, 10).

It is ludicrous that their minor daughters are exposed to early pregnancy and its problems. Most times, "decisions affecting the girl in the marriage is usually taken without the girl's inputs. She stands the risks of domestic violence by her husband since she does not have the maturity to handle the challenges of marriage. She is exposed to high risks and hazards related to early pregnancy and childbearing and may be abandoned by the purported husband and treated as a social outcast even among her peers. In the state of her frustrations, hopelessness and helplessness, death may be the nearest acceptable option if she is not given the desired attention and rehabilitated within a reasonable time" (Ukwuoma, 2014, 68).

*Acceptance of child as house help or nanny:* It is really a pity that in Igboland children are employed as house helps and nannies. Children are supposed to be loved by their parents. They are supposed to be taken care by their parents but unfortunately, the reverse is the case. The question remains, who is a house help? A house help is regarded as someone who works for the person, to perform common household chores. A house help is a person who lives with you to work for you, and assist with washing dishes, clothes and washing other things. A house help is not a member of the nuclear family (Tambo, 2014, 229).

In Igboland, some families especially the rich ones employ children from the villages to take care of their children in the urban areas. "Poverty



makes the low families in the rural villages send their young children aged anything between 7 and 18 to serve elite urban families. The employing families on the other hand feel that since they are providing these children with some of the facilities their parents cannot afford in the village, such children are privileged to be house helps. So if they are made to work long hours and are sexually molested by their employers and their children, nobody cares” (Eya, 2002, 66).

When a child grows in this type of environment, the child tends to be over laboured, under-nourished and even under-developed. It is obvious that these children especially the girls end up being victims of child abuse. “The majority of victims, no doubt fall within the category of children in need of special protection such as street children; orphans including those of HIV and AIDS; abandoned and neglected children and other children in distress. It is worth noting that girls working as domestic workers in our big cities are often exposed to sexual exploitation and abuse by their masters and other male members of the family that they serve” (Danpullo, 2008, 56). When a child undergoes all these abuses, most of the time it conveys a strong message in their minds that they are worthless and unloved.

### **3. Child abuse prevention in Igboland of Nigeria**

In Igboland, often we hear cases of child abuse and this preoccupies any sane person in the society. The vision of Igbo people should be to see their children in safe and stable families. It is also important to raise awareness about the role that every single person in the Igbo community play in keeping the children safe in the families, schools and society. Children need to grow in a healthy environment.

*Family:* As already stated before, the family is the foundation of Igbo society. Family plays a vital role in the upbringing of a child. The family nurtures the child so that he or she will be balanced psychologically and in every aspect of their well-being. The child’s relationship within the family in Igboland is not limited only to his parents and sibling but extends to friends, grandparents, aunts, uncles, and other members of the extended family.

Unfortunately, some of these children come from poor families and as such experience child neglect or other type of child abuse. Again, regrettably the poor families where the children are living cannot afford three square meals a day. Imagining what a child in Igboland will be experiencing by living in a family that has constant shortage of food.

Strengthening economic support for poor families will go a long way in reducing child abuse in these families. “Policies that strengthen household financial security by improving the socio-economic conditions of families tend to have largest impact on reducing child abuse by improving parent’s ability to satisfy children’s basic needs” (Hinds & Giardino, 2017, 136).

Again, “the strengthening of families is based on family economic success which focuses on helping individuals improve self-sufficiency through expanded opportunities to work, earn a living wage that provides for the basic needs of the family and build assets that grow the family over time, such as home ownership and retirement accounts; family support system which stress on building appropriate and adequate system of support for healthy family development that encompasses: health care, child care, education, and other essential components of strong families” (Mokomane, 2014, 173). When this is achieved, it will help the poor families especially the parents to cope more effectively with the child’s pressure and actions and equally reducing the destructive elements in the family and society that contributes to child abuse.

*Schools:* The importance of school in the lives of children cannot be over-emphasized. Apart from the fact that it is a formal education which prepares children for the future, it equally helps them to interact with their peers and teachers. “Children spend a large proportion of their working hours in school, and interact with many other social persons there to play a range of social roles. The school contains many microsystems within which children engage with others who are often of great emotional and practical significance for them. It is also perhaps the part of their childhood where there are strong macrosystem influences focusing most obviously and explicitly on children: the culture demands that children should have formal education, requires them to learn specific things in school” (Meadows, 2010, 206).

Child abuse is common in the schools in Igboland. Most of the time, children are considered as domestic workers. “A form of child abuses and labor prevalent in school settings in developing countries involves students doing domestic chores for teachers during school hours and at community schools that provide on-site housing for teachers. The domestic chores include cooking and cleaning, making the teacher’s bed, buying groceries for teachers, fetching water and firewood” (Clauss-Ehlers, 2010, 194).

“Schools and educational facilities are the most trusted of institutions. Society expects schools not only to educate children but also to protect them and prevent violence against them. With regards to child abuse prevention, schools should provide policies, procedures, and supervision for employees so that opportunity for abusive is limited. Again, children should be taught safety curricula that encompass what they should and should not allow, who to tell if they are being, and how to avoid victimization. Personnel in schools and child care should be taught to watch for signs of possible neglect and abuse” (Hirschy & Wilkinson, 2010, 60).

It is the role of the teachers to teach the children (students) to be aware of dangers of abuse. This will help them to understand the characters of a

potential perpetrator and at the same time to know how to protect oneself. Again, “the school staff should participate in training which develops understanding in the signs and symptoms of child abuse. However, it is essential that sufficient discussion of the issues around child protection takes place in school so that all staff develop a clear view of their responsibilities. Awareness of the signs of child abuse needs to be well established neither are potential signs missed nor innocent factors misinterpreted” (Farrell, 2001, 40).

*Society:* For a relatively long time Igbo society has demonstrated a capacity to shape the direction of change within its boundaries. In fact, they have demonstrated ingenuity in their creative adaptability to their environment and in their view with regards to the right of a child (Chuku, cit. in. Falola & Njoku, 2016, 46).

The problem of child abuse is a remarkable and an outstanding problem facing the Igbo society. The impact of child abuse does not end only with the effects it has on the abused children. Rather, it negatively affects the society directly or indirectly in different ways. In Igboland, every aspect of child abuse affects not only the abused child but equally the family, the people around and the society. The effects on the people includes the emotional stress, financial strain, work, social relationships, etc. If care is not taken, the individual who is regarded as the abuser may tend to transmit this ugly character to other individuals and thus constituting a big nuisance to the society.

To this effect, Igbo society considers public awareness as an important tool in preventing child abuse. Public awareness is an important aspect of preventing child abuse and at the same time improving the quality of life of the child in the community. One good thing about public awareness is that it teaches the masses what to do and at how to avoid child abuses.

Another approach to the prevention of child abuse in the society is that of educating the public about the problem through the mass media campaigns. Such campaigns employ public service announcements on radio and television; in newspapers, magazines, brochures, posters and billboards. The rationale behind this approach is that increasing knowledge and awareness about the problem of child abuse will result in lower levels of abuse. The awareness created in the society may also indirectly reduce rates of abuse as professionals and people begin to recognise the signs and symptoms of child abuse and also begin reporting suspected abuse to authorities (Miller-perrin & Perrin, 2012, 90).

If the Igbo society continues to create and promote awareness to the people concerning the prevalence of child abuse, it will definitely help to reduce the cases of abuses. Again, the society can equally organise a prevention programs against child abuse. The sole aim of organising

prevention programs is purely to prevent child abuse before it occurs. The programme teaches the parents on how to handle difficulties in the family. Prevention programs are usually educative, supportive and therapeutic. However, there are programs which are meant for children and sometimes it focuses towards one type of child abuse.

## **Conclusion**

The issue of child abuse in Igboland as a societal problem needs a collective effort. The Igbo people need to work together to help strengthen and support families so as to prevent abuses on children from occurring. However, we need to ask one fundamental question, can we stop child abuse before it ever starts? Sadly, we cannot turn back the clock for those children already harmed by child abuse of various types. For such children, ongoing intensive efforts are necessary to ameliorate the effects of their maltreatment and abuses, to protect them from future harm, and to give them the best chance of developing into whole and healthy functioning adults. However, for those child not yet abused, we can prevent child abuse before it before it happens and as such avert the damaging effect (Guterman, 2001, 3).

Again, we need to ask another question, what can we do to stop child abuse and protect children in Igboland? “Each and every individual in the society has moral responsibility for protection of child abuse. There should be effort from every corner of the society to *stop child abuse* at all levels though responsibility of parents seem to be heavier as it is a question of safety and security of their own children who are also future of our country” (Padhi, 2013, 33). Now is the time to break the silence on child abuse in Igboland of Nigeria because it has lasting effect on the child’s personality, mental health, physical health, social behaviour, social skills and at times prevents the child from committing suicide.

## **References:**

- AMERICAN PSYCHIATRIC ASSOCIATION. (2013). *Diagnostic and Statistical Manual of Mental Disorder*. (5th ed). American Psychiatric Publishing: Washington, DC.
- BEKERIAN, D., & LEVEY, A. (2012). *Applied Psychology: Putting Theory Into Practice*. New York: Oxford University Press.
- BERINA, R. (2010). *The Heart*. Mill City Press: Minneapolis.
- CHILDS, A., & MELTON, G. (2012). *Rural Psychology*. Plenum Press: New York.
- CLAUSS-EHLERS, C. (2010). *Encyclopedia of Cross-Cultural School Psychology*. Springer: New Jersey.

- COLMAN, A. (2009). *Oxford Dictionary of Psychology*. Oxford University Press: New York.
- DANPULLO, R. (2008). *The Socio-legal Perspective of Child Protection in Cameroon*. Presses Universitaires D'Afrique: Yaoundé.
- DAVIS, R. (2011). *Animals, Diseases, and Human Health: Shaping Our Lives Now and in the Future*. Praeger: California.
- EMEZUE, G., KOSCH, I., & KANGEL, M. (2014). *Justice and Human Dignity in Africa*. Hpc books: New York.
- EYA, R. (2002). *Child Abuse and Neglect*. Sages Publications : Enugu.
- FALOLA, T., & NJOKU, R. (2016). *Igbo in the Atlantic World: African Origins and Diasporic Destinations*. Indiana University Press: Indianapolis.
- FARRELL, M. (2001). *Key Issues for Primary Schools*. Routledge: London.
- FREEMAN, M. (2014). *The Future of Children's Rights*. Martinus Nijhoff Publishers: Leiden.
- GUTERMAN, N. (2001). *Stopping Child Maltreatment Before it starts: Emerging Horizons in Early Home Visitation Services*. Sage: California.
- HINDS, T., & GIARDINO, A. (2017). *Child Physical Abuse: Current Evidence, Clinical Practice, and Policy Directions*. Springer: Cham.
- HIRSCHY, S & WILKINSON, E. (2010). *Protecting Our Children: Understanding and Preventing Abuse and Neglect in Early Childhood*. Wadsworth Cengage Learning: California.
- KAY, J. (2003). *Protecting Children*. Continuum: London.
- MASH, J., & WOLPE, D. (2016). *Abnormal child psychology*. Cengage learning: Boston.
- MEADOWS, S. (2010). *The Child as social person*. Routledge: London.
- MILLER- PERRIN, C., & PERRIN, R. (2007). *Child Maltreatment: An Introduction*. Sage: California.
- MILLER- PERRIN, C., & PERRIN, R. (2012). *Child Maltreatment: An Introduction*. Sage: California.
- MOKOMANE, Z. (2014). *Work–Family Interface in Sub-Saharan Africa: Challenges and Responses*. Springer: New York.
- OFFOHIA, M., & SADIKU, M. (1996). *Ethnic and Cultural Diversity in Nigeria*. African World Press: Trenton.
- OKUMA, P. (2009). *Omumu-the Igbo Life-value: A Challenge to Human Life Issue Today*. Peter Lang: Frankfurt.
- PADHI, I. (2013). Child abuse and Teenage Trauma: Girls in a Slum of Odisha, India. *International Journal of Human Development and Sustainability*, 6(1) 27- 35.
- RANYARD, R. (2017). *Economic Psychology*. British Psychological Society: Chichester.

- RATHUS, S. (2014). *Childhood and Adolescence: Voyages in Development*. Wadsworth Cengage Learning: California.
- STANLEY, C. (1994). *The Source of my Strength*. Thomas Nelson: Dallas.
- UKWUOMA, A. (2014). *Child marriage in Nigeria: the health hazards and socio- legal implications*. Lulu Press: California.

## PRESCHOOL INSTITUTION AS A DETERMINANT OF THE DEVELOPMENT OF PETTY MOTORISM IN PRE-SCHOOL CHILDREN

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**Abstract:** *The paper first examined the complexity of the preschool institution and assessed the status of petty motoring for children entering the first grade of the Elementary School, and the nestablished the relationship between the indicators of petty motor is mof children on the one hand and the length of attendance at the preschool institution from one, two, three and many years on the other. The aim of the research is to determine whether and how much attendance of a preschool institution affects the development of graphomotor readiness and visual perception in children going to school. In other words, this research was supposed to find out whether attendance at a preschool institution was a determinan to the development of petty motorism in children. The results obtained on a sample of 141 children do not confirm the assumption that the length of attendance at the preschool institution influences the indicators of fine motoring of children be fore enrollment in school. The variance an alysis showed that the difference sbetween groups and with ingroups were random because the F-test values  $F = 0.708$  with 2 degrees of freedom between groups and 138 degrees of freedom within groups and  $p = 0.494$  for the edge ornament and  $F = 1.050$  with 2 degrees of freedom between groups and 138 degrees off reedom within groups and  $p = 0.353$  for a special test are not statistically significant. From the presented results, the iranalyzesand discussions, the basic conclusiono fthe research was drawn out, which states that the attendance of preschool in stitutions for one, two, three and more years does not influence the development of petty motoring in children. The obtained finding implies that the tests, the edge ornament and the special test, were*

*quite difficult for children from the sample, which is explained primarily by the maturation of the structure, but also by specific learning and exercise that would contribute to the child's overall development.*

**Keywords:** *small engineers; preschool; children; graph omotors kills; visual perception;*

## **Introduction**

Bearing in mind that the family, most often, is not able to provide all the necessary conditions that would positively affect all aspects of development, institutional preschool education and upbringing appear as a supplement to family education, and in exceptional cases as a replacement for the family. Pre-school education enables the child to participate actively in the community of children who are similar to themselves in conditions that are adapted to the child, his possibilities, interests and development needs.

"The basic goal of staying children in preschool institutions is the overall development of every child's potential and progress in each of its aspects, with the expansion and qualitative improvement of those developmental ranges that the child has already won. It is an effort to form an emotional personality, aware of itself and its potentials, its social and natural environment, which is open, communicative, constructive and creative, satisfied with fulfillment of optimism in relation to itself, other people and life in general, which is governed by human values and aspirations, in which physical, intellectual, emotional and social characteristics, nurtured authentic needs, developed personal characteristics, as well as individual preferences and abilities are balanced. Although a child has all the preconditions for developing a mature human person, spontaneous reporting of his mental and physical potential is not sufficient for them to develop into lasting personality traits. Therefore, in addition to the family, appropriate environment for children's development and learning, the intentional effects of pre-school institutions are necessary in order to achieve educational goals by encouraging, stimulating, developing and enriching children's natural potentials within the physical, socio-emotional, spiritual, cognitive development and fostering child expression. These goals are realized through a system of activities that contribute to the realization of certain aspects of child development and personality as a whole, as it strives to acquire experiences and knowledge, and they are realized with the needs and possibilities of each individual child" (Kamenov, 1997, 48-9).

According to Article 22 of the Law on Preschool Education, preparatory preschool program is part of the regular program of the preschool institution



in full-time or half-day duration, which is realized with the children in they ear be foregoing to school. Preparatory preschool program for children who are not included in the regular program of the preschool institution, is organized in pre-school institution, exceptionally in school, in accordance with the Law and the statute of the preschool institution or school. Exceptionally, a pre-school curriculum for children in the family can be organized for a shorter duration. More detailed conditions for the preparation of a pre-school program are prescribed by the Minister (page 7).

Children aged three to five and a half years old, as well as children attending pre-school programs (preparing for school), can be brought up and educated on the basis of the applicable law in Serbia using two models (A and B model). Model A gravitates an open system of upbringing and action development of programs depending on the interest of children, while model B has characteristics of cognitive – development program and elaborated educational goals, teacher tasks and types of activities among which the educator can choose and develop them depending on needs, possibilities and interest of children.

Pedagogical functions related to the activity of preschool education are only one of the domains of the activities of preschool institutions which, in addition to educational, have also a social and preventive-health function. One of the general tasks of preschools is that, by creating conditions for the development of a set of skills needed child later in life, contribute to physical maturity and readiness of children for school in terms of higher levels of general physical development, the development of motor skills and endurance to create, healthy and strong body of the child ready for the efforts that require the attendance of classes. In order to achieve as optimal a level of physical readiness, training should be done indirectly in the entire activity of the preschool institution, and directly by exercising all the contents that achieve the goals and tasks of physical, perceptual and health-hygienic activities.

### **Indicators of petty (fine) motorism**

An important determinant of the physical maturity of children for going to school is the readiness, that is, the degree of development of the motor analyzer and the ability for fine motor coordination. This component of physical maturity is of great importance for writing, drawing, or for the child's success at school. Writing is an extremely complex psycho-physiological skill based on the performance of fine-coordinated graphic movements. Graphic movements that make the motoric writing act belong to a class of voluntary motor skills.

The organization of psychomotorics of the upper extremities is in direct relation with the development of the psychosocial life of the

personality as a whole. It arouses the basic schemes of the thought process and participates in the manifestation of creative needs, both of the child and of the adult in all those domains that characterize the social field and social life from its early beginnings. The upper extremities fit their activities with speech, intelligence, thinking and feelings, making one integral, which is the basic feature of psychosocial development and psychosocial life (Čordić, Bojanin, 1992, 71).

Research shows that the branch of children's hands of six and seven years old generally has a cylinder shape, somewhat widespread at the ends, with a poorly expressed "waist". So a survey of 1280 children has shown that the hand of a six-year-old child is morphologically sufficiently prepared for work that must be performed at school (Antropova i Koljčova, 1986, 154). When analyzing the motorism, the muscle tone matures at the latest and develops in parallel with the needs of increasingly finer activities in the manipulative field. The final phase of differentiation, which means that the maturity of the finger motorism will be mastering the graphomotor activities and the act of writing (Čordić, Bojanin, 1992, 72).

While the process of differentiation of the lower extremity tones is performed for 30 months of the child's life, so far the differentiation of the tones and the appearance of clean movements on the extremities of the upper extremities (fingers and palms of the hand) occurs only around the age of seven years. This allows the impulse for movement placed in certain muscle groups there, to arrive, without discharging into the adjacent areas. Thus, it is possible, according to needs, to perform completely precise manipulative activities. Thus, it is possible, according to needs, to perform completely precise manipulative activities. Further refinement of the movement, as well as the development of the structures involved in the movement, will certainly depend on the training and preservation of the anatomical and functional integrity of the nervous muscular circuits. This is the time when you lose the last side movements at rehearsals maturity assessment of muscle tone (Bojanin, 1979, 22). Other studies show that the hand of a six-year-old child, in most cases, is not capable of performing subtle, specialized movements necessary for writing (Marshall, 1983, 82) by its morphological possibilities.

At the age of children from six to seven years, "the graphomotor level appears as a kind of test or checking the organization of the psycho-motor circuit. This level, by special training, which means a special level of requirements, makes the children capable of completely specific activities" (Bojanin, 1979, 52).

Most of the manipulative activities involve vision as the basic control of the movement, especially until movement is automated. The connection between muscles of the eyes, fixation and graphomotor movements is established from the first attempts to hold chalk, crayons and pens. If this

preparation is longer and more diverse, and the children deftly handle these instruments, so far to develop more precise, faster, more coordinated, more reliable hand movements directed by eye movements. In order for the child to achieve graphomotor and oculomotor coordination, it must go through three phases. During the first phase, it tries to get rid of the sharp, unspecified and disobedient movements of the hand. A child doodles, creates curly lines of various lengths, thicknesses, and directions. This is an elementary phase in which the oculomotor and graphomotor activity develop independently of one another. In the second phase at the level of brain function, transfers are established, so that the oculomotor and graphomotor action start to work together. This means that the hand comes under the control of vision. The muscular sense of pressure and kinesthetic for the movement are proprioceptively regulated. The hand achieves skill, but it is still under the control of a visual leader. The third phase, the highest one, is characterized by automated graphomotor movements. Oculomotor and graphomotor coordination are the condition for reaching this highest level.

The willingly, controlled hand movements as a precondition for writing letters or numbers, are developed by careful coordinated establishment of connections between the graphomotor muscular activity (Vladislavljević, interpretation, 1991, 97-8). It is important to note that "the practical and motor organization of the fine motorism is inherited function at which the speed of maturation is certainly influenced by many central factors that can be brought to virtuosity or impediment to degradation by practice" (Vladislavljević, 1991, 56). Most authors as indicators of psychomotor readiness for the adoption of graphomotor learning (fine motorism) state the level of development of coordination of movement, development of thinking (ability to generalize), visual and auditory observation, motor memory (memory of movement), attention, drawing skills and learning skills (Batoev and Zankov: 1993, 8). The section of school pedagogues in Belgrade, in the course of examining the pre-knowledge of children enrolling in the first grade of primary school, in addition to other tests, applies the test called "marginal ornament" by Professor Friedrich Troy. This test examines graphomotor skills and visual perception. In addition, the understanding of tasks, the skill of their performance, independence in work, accuracy and ability to focus attention are followed. It has been shown that children with specific difficulties in visual perception and graphomotor disorders can be detected by it (Vladislavljević, 1991, 129). In addition to this test, the research uses a special test for the assessment of fine motor-coordination of the movement of compliance, autonomy in work, skill and accuracy.

## **Method**

Problem of research related to the analysis of scientific data on the basis of which it can be determined whether and how attending preschools affect the development of graphomotor skills and visual perception in children. In other words, it was necessary to use the experimental method to determine whether attending preschools for one, two, three or more years affects the indicators of petty motoring for children entering the first grade of Elementary School.

The subject of research is the relationship between attending preschools for one, two, three and more years and indicators of the petty motorism of children entering the first grade of Elementary School.

The aim of the research was to gather scientific data on the basis of which it can be determined whether and how much attending preschools affects the development of petty motor skills in children going to school.

Concretization and operationalization of the goals of research led to the following research tasks:

- Collect data on the length of attendance at a pre-school institution that is presumed to affect the development of petty motor skills in children attending school.
- Collect data by testing fine motor skills in children.
- Collected data by statistical procedures lead to mutual relations.

The study of preschool attendance as a determinate development indicators of fine motor skills should enable: determining the correlation between the examined parameters with the length of preschool attendance expressed in years; comparing the results obtained with the findings of other researchers who have been questioning the phenomenon previously examined under some other tasks and in other populations.

It is planned to calculate the connection between the indicators of petty motorism of children before enrollment in school and the length of attendance at the preschool institution.

Based on the defined subject of this work, taking into account the need and significance of the research, a hypothesis was put in place. It is assumed that there is a correlation between the indicators of petty motorism in children and the length of attendance at the preschool institution.

The problems of this research, in addition to theoretical analysis, views, perceptions and results of previous research from other relevant papers, dictated the need for the application of the descriptive method in order to describe the actual phenomena, the interpretation of the obtained results and the conclusions. In order to determine cause-effect relationships using the ex post-facto procedure, a causal method was used. The statistical

procedure was used to determine the size of the phenomena being investigated and their relationships.

From the kinesiological research techniques in the work were applied: techniques of petty motor skills evaluation - fine (petty) motor tests; study of the pedagogical and psychological documents.

In accordance with research methods and techniques, appropriate instruments have been used. At the stage of collecting data on the length of attending at preschools, a questionnaire was used and pedagogical-psychological documentation was studied. Fine motor testing was performed by pedagogues and psychologists using the Marginal Ornament and the Special Test. These tests are taken (Annex 1).

The population from which the sample was extracted for this study were children (141 children) before entering the first grade of primary school. The research included four preschool groups of children from two preschool institutions "Heroj Miša" and "Djordje Krstic" in Belgrade. The sample included approximately the same number of boys and girls. All the children in the sample attended preschool. A year was attended by 67 children, two years by 28 children and three or more years by 46 children.

Data obtained from the survey were processed by computer. Appropriate statistical techniques were applied in data processing. From descriptive statistical parameters for each variable, the arithmetic mean, standard deviation, minimum and maximum result, and frequency distribution were calculated.

The asymmetry of the curve of the results distribution relative to normal distribution was determined on the basis of the degree of curvature of the kurtosis and the degree of skewness of the skew. By determining the significance of the differences, considering the nature of the variables taken by the method of research, a ( $\cdot 2$ ) chi-square test was calculated. Due to the simultaneous examination of the equality of arithmetic meanings of several sets, a statistical method-analysis of variance was used. The statistical significance of the differences in the arithmetic mean of the corresponding variables between the two variances was determined using the F-test, and the statistical significance of the differences between the arithmetic meanings within the groups using the Tirky test.

The results of this study are presented in tables. Complete statistical data processing was done on the RS-computer using the statistical program SPSS.

### **Results of research and discussion**

Fine (petty) motorism in children enrolling the first grade of elementary school were studied on the basis of the Marginal Ornament and the Special

Test, and basic indicators of the development of fine motor skills were obtained.

Table 1. Descriptive statistical indicators for the Marginal Ornament

Number of respondents	M	$\delta$	SK	KU	Minimum	Maximum
141	2,30	0,57	- 1,28	1,622	0,20	3,00

Table 2. Descriptive statistical indicators for the Special Test

Number of respondents	M	$\delta$	SK	KU	Minimum	Maximum
141	5,92	2,71	- 0,11	- 0,425	0,00	12,00

Both tests were done by all the children of the sample. Results of descriptive indicators of fine motor skills in peripheral ornament showed that the range of results expressed in points is from 0.20 to 3 points. The arithmetic mean is 2.30 points, the standard deviation is 0.57 points. Results of skewness  $SK = -1.28$  and kurtosis  $KU = 1.622$  indicate that the frequency distribution of the normal curve is negatively skewed and leptokurtic.

The results of descriptive indicators of fine motorism for the Special Test have shown that the range of results, expressed in points, ranges from 0 to 12. The arithmetic mean is 5.92 points, the standard deviation is 2.71 points. The dimensions of the deviations from the normal distribution of skewness  $SK = -0.11$  and kurtosis  $KU = -0.425$  indicate a deviation of the obtained values and we conclude that the distribution is positively skewed and platykurtic in relation to the normal curve.

In order to have better examination and easier interpretation, as well as later discussions and conclusions, class interval groups were defined, three groups for each of the tested fine motor parameters. The criteria for this division is the arithmetic mean taken  $\pm$  one standard deviation of the parameters examined, the highest and the lowest result.

The first group-category includes children whose study values are below the average. The second category-group includes children whose average values are examined. The third group-category includes children whose values are above the average.

Table 3. Categories of children according to the parameter tested

	Average	N	%	Below average	N	%	Above average	N	%
Indicator of pettymotorism									
Marginal Ornament	1,73-2,85	108	76,6	0,20-1,72	21	14,9	2,86-3,00	12	8,5
Special Test	3,21-8,63	87	61,7	0,00-3,20	26	18,4	8,64-12,00	28	19,9

Evaluation level of development of fine motor skills in children entering the first grade of primary school, was carried out based on the analysis of numerical tests: the Marginal ornament and Special test, shows that the average value for Marginal ornament within the limits expected to have obtained the average value for a Special test below the expected levels, although both tests evaluated graphomotor skills and visual perception.

Based on the analysis of results, the results of the Special test of children compared to the Marginal ornament showed low values, although the deviation measures of skewness and kurtosis indicate that both tests are difficult for the children to be tested. The obtained average score for the Marginal ornament 2.3 points, a minimum value of 0.20 points and a maximum value of 3.0 points indicates that 108 children (76.6%) achieved a score of 1.73 to 2.85 points, below this average is 21 children (14.9%), and above the average is 12 children (8.5%).

The average score for the special test of 5.92 points, the minimum value of 0 points and the maximum value of 12 points, show that 87 children (61.7%) achieved a score of 3.21 to 8.63 points, which places children in the average group in our research, although every child mature for school should score at least 8 points, in terms of the development of graphomotor skills and visual perception. Under the average are 26 children (18.4%) with a score of 0.0 to 3.2 points, and above the average are 28 children (19.9%) with results of 8.64-12 points. Adhering to the norms, the examined children with the above-average result, would have average results. The reasons for such low results should certainly be found in the factors responsible for this phenomenon. Graphomotor movements that make up the motoric act of writing are determined by the maturation of structures and their functions. Reporting normal tonic tension in the muscles of the upper extremities occurs mostly around the age of 7, when the child is also capable of performing fine manipulative movements (see the development of fine motor skills from birth to school age in the introductory part of the paper). This explanation justifies the weight of both tests but does not justify the drastic

difference in the results. We have to look for it in the environmental factors, that is, in learning and practicing. The fact is that children in the family and pre-school institutions draw more circle (ball), + (cross) and triangles (roofs) than horizontal lines written below each other which require a high level of precision in children. The reason is, perhaps, the fact that children did not understand the task or did not have enough built and developed speed of movement as well as orientation in time, and the test, in contrast to a marginal ornament, was due to the time.

Table 4. Attending preschool institutions and indicators of fine motorism

Anthropo- motor parameters	.Attending preschool institutions (year)	No. of examine d	M	$\delta$	F-test	Degree of freedom	Significance of differences
Marginal Ornament	One	67	2.28	0.58	0.708	2	0.494
	Two	28	2.40	0.47			
Special Test	Three +	46	2.25	0.60	1.050	138	0.353
	One	67	5.62	2.59			
	Two	28	6.50	2.93			
	Three +	46	6.00	2.74		138	

The study results do not confirm the hypothesis according to which the length of preschool attendance affects indicators of fine motor skills of children before entering school. The variance analysis showed that the differences between groups and within groups were random because the F-test values  $F = 0.708$  with 2 degrees of freedom between groups and 138 degrees of freedom within groups and  $p = 0.494$  for the marginal ornament and  $F = 1.050$  with 2 degrees of freedom between groups and 138 degrees of freedom within groups and  $p = 0.353$  for a special test are not statistically significant.

When consolidating the impact of attending preschool institutions on the indicators of fine motorism, we did not establish a statistically significant relationship. So the hypothesis, that it is assumed there is a relationship between the fine motor skills of children and length of preschool attendance, was dropped.

## Conclusion

In the theoretical part there was a lot of talk about the influence of organized institutional preschool education and upbringing on the general development of the child. One of the conclusions was that good preparation of one, two or more years, covering all aspects of the physical development of the child, should provide satisfactory results on which we can evaluate indicators of physical development of children for school. Our assumption that the preschool institution and the length of attendance expressed in



years can be a factor that influences the indicators of fine motorism has not been confirmed. The obtained finding implies that the tests, the marginal ornament and the special test, were quite difficult for children in the sample, which is explained primarily by the maturation of the structure, but also by specific learning and exercise that would contribute to the child's overall development.

### References:

Антропова, М. В., Кољцова, М. М. (1986). *Психофизиолошка зрелост деце*. Београд: Завод за уџбенике и наставна средства.

Белинова, Л., Јирова М. (1976). *Како припремити дијете за школу*. Сарајево: ООУР Завод за уџбенике и наставна средства.

Даница, Ц., Владимир, П.: (2016). *Квантитативне и квалитативне карактеристике морфолошког и моторичког простора предшколске деце*. Београд: Учитељски факултет-Даница, Ц., Владимир, П.: (2016). *Мониторинг физичког васпитања*. Београд: Драслар партнер.

Дуран, М. (1976). Утицај једногодишњег годјоно-образовног рада у предшколској установи на зрелост за полазаку школу. *Предшколско дете*, 2, 173-179.

Ђорђевић, Б. (1968). Зрелост детета за полазаку школу и проблеми обуке, *Настава и васпитање*, 3, 265-76.

Граовац, В. (1999). Параметри психофизиолошке зрелости релевантни за упис у школу, *Зборник, Емпиријска истраживања у психологији*.

Хорват, Л. (1986). *Предшколско васпитање и интелектуални развој*. Београд: Завод за уџбенике и наставна средства.

Каменов, Е. (1997). *Припрема детета за школу*. Нови Сад: Тампограф.

Каменов, Е. (1999). *Предшколска педагогија*. Београд: Завод за уџбенике и наставна средства.

Лурија, А. Р. (1982). *Основне уроне психологије*. Београд: Нолит.

Медвед, Р. (1964). Критериј за одређивање зрелости за школовање. *Физичка култура*, 7-8, 294-298.

Муџић, В. (1968). *Методологија педагошког истраживања*. Сарајево: Завод за издавање уџбеника.

Проскура, Е. (1977). О психологическој готовности к школе првокласника. *Дошколно васпитање*, 8, 34-38.

## **PROFESSIONAL INTEGRATION AND CAREER DEVELOPMENT - BETWEEN NECESSITY AND REALITY**

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**Abstract:** *This work is a theoretical presentation of what it means to have succesful carrer development and proffesional integration. This study is based on the data that was extracted from the reaserch that has been done regarding the same problematic. The conclusions show that professional integration in education and career development is a continuous process that is closely linked to both external and internal factors. It is also very important that the young graduates of the psycho-pedagogical training programs for the teaching career are valued, determine the positive impact that comes from the work done at the school level, and provide them with alternatives of laughter and pedagogical action.*

**Key words:** carrer; development; integration; students; internship;

### **Introduction**

At present, the labor market trend in Romania is restructuring, labor transformation and process automation, manifested in an intercultural and competitive environment. As a result, current or future employees in the educational services sector are confused or even uncertain about their professional integration and career development.

This fundamental remodeling of work in the educational sector, both public and private, causes difficulties in addressing the career concept. Young aspirants in a teaching career have access to, or are often familiar with, developmental models that emphasize stability and commitment, to the detriment of mobility and flexibility. The instability felt by university graduates in this new labor market makes us look at the didactic career not as a lifelong commitment to an employer, but as an exchange of services and skills for a number of employers who need completed projects .

While the form of teaching career changes from stability to mobility, the theories of orientation in the didactic career seek to remodel the concepts

and researches of the 20th century to integrate and apply them in the context specific to the Romanian school.

The purpose of this research is to identify the career counseling needs of young graduates in training programs for the teaching career, the rate of their employability in the field of specialization, and the level of knowledge about the employment opportunities offered by the labor market in the western region in the education services sector.

The objectives of this study facilitate the implementation of ameliorative measures to improve the quality of young graduates' professional integration, the accessibility of opportunities for career development, but also the formation of new competences for access to and employment of a long-term job, and last but not least for a possible development of educational entrepreneurship. In order to carry out this study, we have built and applied a questionnaire focusing on the needs of young graduates of the psycho-pedagogical training programs for the teaching career. The questionnaire has 27 questions with optional items, multiple choice items, open questions, and questions with a liker scale of 1 to 5.

The sample consisted of 432 subjects aged 19-30 years, bachelor degree students or master degree students completing the psycho-pedagogical training program for certification for the teaching career. For data analysis we have used SPSS Statistics and Microsoft Excel. I will hereby present study assumptions that are differentiated by gender and age category.

### **Hypothesis 1. Perception on the importance of psycho-pedagogical studies in gaining a job in the field of specialization (V.I. = gender)**

There are significant gender gaps in the perception of the importance of psycho-pedagogical studies in gaining a job in the field of specialization.

In order to analyze this hypothesis we used SPSS, specifically the T test.

Independent Variable = Gender, Dependent Variable: Item 10

How important do you think psycho-pedagogical studies have in accessing and getting a job in the field of specialization?

Tabel no. 1. Group Statistics

4. What is your self-identified gender:	N	Mean	Std. Deviation	Std. Error Mean
9. How important do you think phisycal appearance is when trying to get a job in the educational field?	165	4,12	,697	,054
1 - masculin				
2 - feminin	267	4,15	,796	,049
10. How important do you think psycho-pedagogical studies have in accessing and getting a job in the field of specialization?	165	3,98	,880	,068
1 - masculin				
2 - feminin	267	4,21	,797	,049
11. As far as you know, there are policies that support internships in school?	165	1,50	,502	,039
1 - masculin				
2 - feminin	267	1,31	,464	,028
12. As far as you know, there are laws that support mentoring in pedagogical practice?	165	1,48	,501	,039
1 - masculin				
2 - feminin	267	1,43	,496	,030
13. As far as you know, are there programs that offer internships abroad?	165	1,58	,625	,049
1 - masculin				
2 - feminin	267	1,54	,781	,048

Tabel no.2. Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
9. How important do you consider to be the physical aspect when applying for a job in education?	Equal variances assumed	3,313	,069	-4,430	430	,668	-,032	,075	-,180	,116
	Equal variances not assumed			-,444	382,200	,658	-,032	,073	-,176	,111
10. . How important do you think psycho-	Equal variances assumed	,893	,345	-2,821	430	,005	-,232	,082	-,393	-,070

pedagogical studies have in accessing and getting a job in the field of specialization?	Equal variances not assumed			- 2,755	321,430	,006	- ,232	,084	- ,397	- ,066
11. As far as you know, there are policies that support internship stages in school?	Equal variances assumed	27,406	,000	3,928	430	,000	,186	,047	,093	,279
	Equal variances not assumed			3,856	326,826	,000	,186	,048	,091	,281
12. As far as you know, there are laws that support mentoring in pedagogical practice?	Equal variances assumed	2,494	,115	,975	430	,330	,048	,049	- ,049	,145
	Equal variances not assumed			,973	344,857	,331	,048	,049	- ,049	,145
13. As far as you know, are there programs	Equal variances assumed	2,136	,145	,643	430	,520	,046	,072	- ,095	,188

that offer internships abroad?	Equal variances not assumed			,678	402,2 45	,498	,046	,068	-, ,088	,180
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In Table number 2 we have specified the values obtained by applying the T test, having a coefficient F taht equals 893, significantly at a threshold <0.05. Thus, hypothesis number 1 is validated in the sense that there is a significant gender difference in the importance of psycho-pedagogical studies in gaining a job in the field of specialization. Thus, female subjects obtained an average  $m = 4.21$ , and male subjects achieved an average  $m = 3.98$ , confirming that female subjects at the time of engagement attach greater importance to psycho-pedagogical studies, than male subjects.

Additionally, from the above table, it can be observed that there is a significant difference between women and men in the knowledge of existing legislation and programs on internships in schools. Applying the T test, a coefficient  $F = 27,406$  was obtained, significantly at a threshold <0,05. Thus, there is evidence that there is a significant gender gap in the knowledge of existing legislation and programs on internships in school. Thus, female subjects obtained an average

$m = 1.31$ , while male subjects obtained an  $m \text{ mean} = 1.50$ , confirming that female subjects know, have a higher degree of interest in on existing policies, legislative documents and programs on internships in schools.

### **Hypothesis 2. Perception of the importance of psycho-pedagogical studies in gaining and obtaining a job in the field of specialization (VI = age)**

There is a significant difference depending on the age group's relevance to the importance of psycho-pedagogical studies in gaining a job in the field of specialization.

To analyze this hypothesis we used the SPSS program, the Anova test.

Independent Variable = Age;

Dependent Variable:

- the importance of physical appearance when engaged in education;
- the importance of psycho-pedagogical studies in gaining a job in the field of specialization;
- knowledge of the presence of internship at school;
- knowledge of laws that support mentoring in pedagogical practice;
- knowledge of programs offering pedagogical practice abroad.

### Descriptives

1, 2, 3 = age category in years.	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
9. How important do you consider to be the physical aspect when applying for a job in education?	1 = 199 19-22 2 = 88 23-25 3 = 145 26-30 Total	3,86 4,32 4,41 4,14	,827 ,558 ,630 ,759	,059 ,059 ,052 ,037	3,75 4,20 4,31 4,07	3,98 4,44 4,52 4,21	1 3 3 1	5 5 5 5
10. How important do you think psycho-pedagogical studies have in accessing and getting a job in the field of specialization?	1 = 199 19-22 2 = 88 23-25 3 = 145 26-30 Total	3,94 4,16 4,35 4,13	,812 ,771 ,854 ,836	,058 ,082 ,071 ,040	3,83 4,00 4,21 4,05	4,06 4,32 4,49 4,20	1 1 2 1	5 5 5 5
11. As far as you know, there are	1 = 199 19-22	1,45	,498	,035	1,38	1,52	1	2



<p>policies that support internship internships in school?</p> <p>2 = 23-25</p> <p>3 = 26-30</p> <p>Total</p>	<p>88</p> <p>145</p> <p>432</p>	<p>1,28</p> <p>1,35</p> <p>1,38</p>	<p>,454</p> <p>,479</p> <p>,486</p>	<p>,048</p> <p>,040</p> <p>,023</p>	<p>1,19</p> <p>1,27</p> <p>1,34</p>	<p>1,38</p> <p>1,43</p> <p>1,43</p>	<p>1</p> <p>1</p> <p>1</p>	<p>2</p> <p>2</p> <p>2</p>
<p>12. As you know, there are laws that support mentoring in pedagogical practice?</p> <p>1 = 19-22</p> <p>2 = 23-25</p> <p>3 = 26-30</p> <p>Total</p>	<p>199</p> <p>88</p> <p>145</p> <p>432</p>	<p>1,34</p> <p>1,40</p> <p>1,63</p> <p>1,45</p>	<p>,474</p> <p>,492</p> <p>,483</p> <p>,498</p>	<p>,034</p> <p>,052</p> <p>,040</p> <p>,024</p>	<p>1,27</p> <p>1,29</p> <p>1,56</p> <p>1,40</p>	<p>1,40</p> <p>1,50</p> <p>1,71</p> <p>1,50</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p>	<p>2</p> <p>2</p> <p>2</p> <p>2</p>
<p>13. As far as you know, are there programs that offer internships abroad?</p> <p>1 = 19-22</p> <p>2 = 23-25</p> <p>3 = 26-30</p> <p>Total</p>	<p>199</p> <p>88</p> <p>145</p> <p>432</p>	<p>1,45</p> <p>1,47</p> <p>1,74</p> <p>1,55</p>	<p>,499</p> <p>,502</p> <p>1,012</p> <p>,725</p>	<p>,035</p> <p>,053</p> <p>,084</p> <p>,035</p>	<p>1,38</p> <p>1,36</p> <p>1,58</p> <p>1,48</p>	<p>1,52</p> <p>1,57</p> <p>1,91</p> <p>1,62</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p>	<p>2</p> <p>2</p> <p>5</p> <p>5</p>

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
9. How important do you consider to be the physical aspect when applying for a job in education?	Between Groups	28,787	2	14,393	28,118	,000
	Within Groups	219,600	429	,512		
	Total	248,387	431			
10. How important do you think psycho-pedagogical studies have in accessing and getting a job in the field of specialization?	Between Groups	14,023	2	7,012	10,473	,000
	Within Groups	287,227	429	,670		
	Total	301,250	431			
11. As far as you know, there are policies that support internship internships in school?	Between Groups	1,823	2	,912	3,905	,021
	Within Groups	100,156	429	,233		
	Total	101,979	431			
12. As far as you know, there are laws that support mentoring in pedagogical practice?	Between Groups	7,730	2	3,865	16,724	,000
	Within Groups	99,149	429	,231		
	Total	106,880	431			

13. As far as you know, are there programs that offer internships abroad?	Between Groups	8,023	2	4,011	7,867	,000
	Within Groups	218,753	429	,510		
	Total	226,775	431			

There is a significant difference depending on the age group's membership in the importance of psycho-pedagogical studies in accessing and obtaining a job in the field of specialization. Applying Anova, taking the dependent age variable, we obtained the following significant results: a  $F = 10,473$  coefficient significantly at a significance threshold  $<0,05$ , which demonstrates that there is a significant difference between the three age categories. Looking at the average table we note that for the first age category (19-22 years) we obtain an average  $m = 3.94$ , for the second age category (23-25 years) we obtain  $m = 4.16$  and for the category the third age (26-30 years) we obtain an average  $m = 4.35$ . Studying these environments we see a steady increase with age. Thus, *with the aging, young people consider psycho-pedagogical studies to be increasingly important in accessing and obtaining a job in the field of specialization.*

In conclusion, hypothesis number 2 is validated.

Additionally, we can see from the table that there are significant differences depending on the age group and other dimensions such as:

1. *The importance of the physical aspect when hiring in education*, where we obtain a significant  $F = 28,118$  at a significance threshold  $<0,05$ . Thus, belonging to an age category is particularly important when considering physical appearance. We notice that with the aging, we see increasing importance. Category 1 = 3,86, category 2 = 4,32, category 3 = 4,41.

2. *Knowledge about internship internships in school*, where we get a  $F = 3,905$  significantly at a significance threshold  $<0,05$ . Thus, the knowledge about internships in school is well structured in the age category 1 where  $m = 1.45$  and the least structured are in the age category 2 where  $m = 1.28$ .

3. *Knowledge of laws that support mentoring in pedagogical practice* where we obtain a significant  $F = 16,724$  at a significance threshold  $<0,05$ . Thus, we can see a significant, gradual increase in the knowledge of laws that support mentoring in pedagogical practice as they age. For the first age category we recorded  $m = 1.34$ , for the second  $m = 1.40$ , and for the last category  $m = 1.63$ .

4. *Knowledge about programs offering pedagogical practice abroad* where we obtain a  $F = 7.867$  significant at a significance threshold  $<0.05$ . Thus, we can see a significant, gradual increase in the knowledge about programs offering pedagogical practice abroad with the aging. For the first age category we have an average  $m = 1.45$ , for the second  $m = 1.47$  and for the last category  $m = 1.74$ .

## **Conclusions**

Professional integration in education and career development is a continuous process that is closely linked to both external and internal factors. The external context is volatile, influenced by legislation, by various administrative factors. In the development of the teaching career it is also important to mention the social framework and here I refer to the importance of the individual to be encouraged and supported by both the family and colleagues, teachers.

It is important that the young graduates of the psycho-pedagogical training programs for the teaching career are valued, determine the positive impact that comes from the work done at the school level, and provide them with alternatives of laughter and pedagogical action. From an internal point of view, it is very important for the individual to reach an adequate level of development and professional satisfaction so that he / she can overcome any obstacles during the teaching career.

## **References:**

Brott, P. E. (2001), *The storied approach: A postmodern perspective for career counseling*. Career Development Quarterly, 49(4), 304-313.

Brott, P. E. (2005), *A constructivist look at life roles*. The Career Development Quarterly, 54, 138-149.

Căprărescu G., Stancu D.G., Anghel G., (2009), *Human Resources Management. Synthesis. Lattices. Case Studies*, University Publishing House, Bucharest.

Chircu, S., (2013), *Career counseling needs for students – a comparative study*, Universitatea Politehnica, Bucharest

Peavy, R.V., (1997), *Sociodynamic Counseling. A constructivist perspective*. (1st ed.). Victoria: Trafford.

Saks A.M., (2006), *Multiple predictors and criteria of job search success*, Journal of Vocational Behavior, 68 (2006), pp. 400–415.

# THE ROLE OF PUNISHMENT IN THE EDUCATIONAL SYSTEM AND ITS EFFECTS ON THE DEVELOPMENT OF PERSONALITY

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**Abstract:** *Punishment is used in the educational system as a strategy to amend undesirable behaviour. The purpose is to determine the child to make a distinction between what is good and what is bad, between what is permitted and what is forbidden. By being punished the child is encouraged to amend his behaviour and find other ways in which to act, so that they will be accepted from a social and cultural point of view. By being punished, the child is forced to realize the connection between his behaviour and the consequences of his behaviour. The research done with the help of students from West University of Timisoara is trying to emphasize the positive or negative impact of punishment on the development of personality.*

**Key words:** *punishment; discipline; pupils / children; school; family;*

## **Introduction**

What does the punishment represent in the educational system? It is an instrument of action through which the child / pupil is forced / determined to modify his behaviour in a desired / accepted way by the parents or teachers.

The legitimacy of punishment in the educational system is attributed to the pedagogical thinking from the past. According to the “theory of mental discipline faculty”, “man is naturally evil and forced labour for accomplishing difficult intellectual tasks is a useful exercise for strengthening will. (...) Children’s failure in learning is considered to spring from stubbornness or laziness and so, being an immoral act, it imposed a harsh punishment.” (Ausubel, Robinson 1981: 438).

Physical punishment played an important role in education. Marrou quoted by Skinner: “Education and corporal punishment seemed inseparable to a Greek, to a Jew or an Egyptian scribe from the time of the pharaohs.” (Skinner 1971:89).

Ross Campbell (2007:11) makes a distinction between education by reaction, which focuses on behaviour and proactive education, which takes care of children's needs. Education by reaction springs from the thinking system called behaviourism. The most important representatives of this current were: I. P. Pavlov (classical conditioning), E. L. Thorndike (learning by trial and error / trial and success, reward / punishment, the law of result), J. B. Watson and B. F. Skinner (operant conditioning). They have experimented with animal behaviour: dogs, cats, rats, pigeons etc. and have extended the results of their research to human behaviour as well.

What is specific to behaviourism is the fact that it deals only with measurable, observable behaviours. The causes of certain behaviours are to be found in the external environment, without taking into consideration the internal richness of the person. Behaviour is a response reaction to a stimulus from the environment.

Skinner sees behaviour as "operant" because it acts upon the environment in order to get the desired effect, as opposed to classical conditioning in which it reflexively responds to stimuli. Behaviour can be modified through its consequences. These can be positive reinforcement, negative reinforcement, which deals with avoidance of something unpleasant and punishment. Punishment refers to the application of an unpleasant stimulus after a response. Skinner considered that punishment weakens the response and decreases the possibility that it appears again. He says that resorting to punishment "must be done with the purpose to raise the moral level, to suppress mean actions and to beat down cravings" (1971:161). However, he thinks that punishment is not an effective mean of controlling behaviour because "where positive reinforcement builds behaviour, reinforcement as punishment seems to destroy it" (1971:160) – the explanation is that unwanted behaviour is suppressed without strengthening the desirable behaviour.

In our time behaviourist thinking is considered obsolete. Studies have proved that over short periods punishment seems to suppress undesirable behaviour, but even so, punishment would rather strengthen than reduce unwanted behaviour.

## **Methodology**

The research was done during January-June 2017 period. The test sample was made up of 50 students from almost all faculties and from years I, II, III and Master's degree from West University of Timisoara. The research method was of qualitative nature – the partly structured interview, with the following key questions: if they have been punished, what sort of method was used; what did it mean for them; who punished them (the family, school); in what situation was the punishment used; how often have

they been punished; how did they feel, what have they thought when they were punished; did they recognize their punishment; was their personality influenced by the punishment or not, etc.

### **Research objectives:**

1. Defining the concept of punishment;
2. Identifying the causes that generate the use of punishment in the education of the child / pupil;
3. Identifying the punishment methods used in the educational system;
4. Analysing the ways in which the punishments influence personality development;
5. Alternate methods to punish.

### **Research hypothesis**

The more often children are punished the more conformist they become and they develop various anxieties that affect their personality.

### **Results**

#### **1. S.F.**

*“The black dot. During the last but one kindergarten year I got a black dot because I did not want to sleep at noon. I clearly remember the effect of the two hours I spent in front of my colleagues with the black dot on my lapel. I spent two hours crying in my mother’s arms once I got home and I decided I will never be put in that situation again and feel so bad in front of my colleagues. “You are allowed to read after you have finished studying for your instrument” – my mother would say during primary school. I usually preferred reading also because studying for my instrument was not an activity I came to enjoy yet. I felt a little compelled and many times I searched for a way to “dodge” studying and to read instead.”*

#### **2. L.M.**

*Punishment: “the reading of extra books – my father would force me to read, to learn a poem by heart every day and this is why I started to hate reading; extra time for studying; extra days spent on duty (for example as a pupil on school duty); time spent isolated from friends. All these punishments made me accumulate lot of frustration and anger. I felt compelled and controlled.”*

#### **3. H.J.**

*“If I was not doing well in school I would not receive my allowance or I was not allowed to go out with friends. I think I was most afraid of the lecture I would receive at home.”*

#### **4. D.B.**

*“I was always scolded, but I was rarely beaten. My parents always preferred to “torture” me with a never-ending lecturing, mostly about homework.*

*Now, thinking about it I realise it was not really a bad thing, but back then ... it seemed never-ending.”*

**5. R.N.**

*“Because I could not read very well at the beginning of primary school my mother kicked me out on the staircase and threatened me she will send me to the orphanage. I really believed her and I was afraid it will happen. In school, the Maths teacher would insult me and all my colleagues.”*

**6. S.B.**

*“If I would happen to get a bad mark in school my parents scolded me. For me this was an important punishment because I felt very guilty.”*

**7. F.B.**

*“Unannounced test papers. When a colleague did not study or behaved badly we would get a test paper and usually we were not prepared for it. I felt this was not fair, but it would make me study harder in order to avoid such unpleasantness.”*

**8. T.C.**

*“The humiliation from the part of some teachers. For example if I did not know how to solve a Maths exercise the teacher would force me to write in my notebook while standing in front of the class. That teacher made me hate Maths.”*

**9. C.A.**

*Punishments: “scolding, dissatisfaction on the part of the parents, hating to read what was imposed.”*

**10. F.S.**

*“The punishment I received especially from my mother was not physical. She preferred not to talk to me, and this thing hurt the most. Because we were both stubborn and vain, we would make up only after a day of not talking to each other. This made me ask for a lot of explanations when I argue with somebody. Only after the explanations would I calm down. In school the teachers punished me by forcing me to re-do my homework correctly. Thus I have discovered that a mistake can be amended.”*

**11. E.R.**

*“When I was young and I would just be learning to write my father was the one who checked my homework. If I made any mistakes and “ate” any letters he would beat me. At present I think it had a good outcome because it taught me to be very neat in writing and in everything I do, but back then I felt frightened every time he would ask to check my homework.”*

**12. O.P.**

*“When I was doing something wrong as a child the biggest punishment for me was to see my mum upset or for her not to talk to me anymore (for a while). In my 4<sup>th</sup> grade I forgot my notebook at home with my civic education homework and the teacher thought I was lying because I did not do my*



*homework. For this the teacher beat my palm with the ruler. I felt very humiliated and misunderstood. In another class I did not know a definition and I was punished to write it down 50 times. I found this really boring and inefficient.”*

**13. O.D.**

*“TV restrictions when I did not want to do my homework; threat with a belt beating – this happened only when I was little and my father would beat me when I was naughty. I was afraid, but I would do it again; laptop and phone restrictions when I was in high-school, after ten o’clock at night, because my parents thought I should be rested for school. This punishment made me feel that I was not allowed to manage my own time. In school: Cards – this system was applied in my school in order to sanction certain irregularities. They made me afraid all the time of what would happen if I do the wrong thing (for example, if you would not wear your uniform, if you were naughty or made noise) – the reason for this system was that they were not able to control the class otherwise. Applying the same treatment – the teacher would do to us the same thing we did to another pupil and ask us whether we liked it. This punishment made me understand that what I was doing was wrong and that I should consider the feelings of other pupils before hurting them. Bad marks: if I was being naughty, the teacher would quiz me and as a punishment he would give me a bad mark. I found this punishment was really unfair and I felt aggrieved.”*

**14. V.B.**

*“The most used punishment in my family was the lack of pocket money for a week. My mother was the one who enforced this punishment but many times she forgot to inform our father that we were punished. So me and my brother would go and ask him for money and this is how we would cope. Another punishment my mother had for us was to not let us go out with friends; this is the one I hated the most.”*

**15. U.Y.**

*“In our family most of the punishments were for moral things. For example, I was beaten because I stole some money when I was 9-10 years old. During primary school the biggest punishment for me were bad marks, followed closely by public scolding. I felt really ashamed, humiliated and misunderstood.”*

**16. T.G.**

*“One of the most memorable punishments I received was when my father forced me to stand on my knees on corn kernels, in the corner. I don’t remember why, but in primary school I pushed a girl off a rail. When I think about it, I am amused by the absurd punishment and I’m sure I could never do that to my child!”*

**17. J.S.**

*“It was very important for me the way in which my parents received the information about my school situation. I was suffering very much when I got a bad mark because I knew my mother would be disappointed. My mother would always go to parents’ meetings in school and I was always afraid of her reaction to finding out about my bad marks or an absence. If I knew she was upset about it, this was punishment enough for me.”*

**18. B.O.**

*“I think the first punishment I remember was around the age of 4. I was visiting a friend and he had two identical toys, like those from Kinder eggs. I liked it so much, that I took one home with me. My mother saw it one night and told me: “I do not raise thieves I this house”. Her words made me realize I did a very bad thing. The next day I apologised to the grandmother of my friend. I felt really bad. I never took anything without permission since then. The second punishment I remember has to do with the Maths class in my 4<sup>th</sup> grade. Our teacher would give us maths problems to solve in class and I was not very good at it. Even now, I would rather do exercises alone at home than in class, where there is a certain pressure and I have to prove what I know. Back then I knew that the teacher was not in a good mood and that made it even harder for me to concentrate. She walked around the class and when she stopped behind me she had a look at my notebook and suddenly I felt her palm strike me on the back of my head. At that moment I felt like the stupidest girl in class and since then I have always hated teachers spying on my notes. This happened to me again during the Maths tests in my 8<sup>th</sup> grade. The supervising teacher stopped and started reading my notes. At that moment I lost my train of thought and I was convinced that everything I wrote was wrong.”*

**19. E.S.**

*Punishments: “my mother would always beat me when I got bad marks, but this influenced me in a bad way because after a while I would hide my bad marks from her. During one of the language classes I kept talking and the teacher moved me in one of the desks up front, alone. I felt a sort of hatred for the teacher, but in the end this was a good thing because I had no one to talk to and I stopped interrupting the class. I got a bad mark (3) in Romanian language class because I did not write an essay. Since then I always did my homework, whether it was correct or not.”*

**20. I.K.**

*“When I was a child, until the end of the 8<sup>th</sup> grade I was punished at home by my mother when my marks were bad. I was not allowed to watch TV and I was scolded for the bad results in school. I was learning as well as I could and I did all my homework because I did not want to disappoint my mother and be punished. In school I do not remember ever being punished by*

*teachers because I was a good pupil and I was studying well. There were situations when I got a bad mark, but I did not interpret it as a punishment, because it was actually a correct consequence of my not being well prepared. As a result, the next time I would learn better and correct my mark. I was very ashamed if I got a bad marks and I wanted to hide this thing from my parents in order not to be punished. During high-school I was not punished for my marks, but even so, I was still afraid to get a bad mark and I was ashamed when it really happened. I think that fear of punishment frequently shaped my behaviour, especially as a child. At that age the punishment of not being allowed outside to play was very hard to accept.”*

**21. F.A.**

*“In my family my mother was the one who punished me. She was of the opinion and still is, that in school you have to learn because this is its purpose. I did not agree with her then, but now I do. Usually I was punished for bad results in school. Otherwise I was a very good child, I did not make problems for my family. As a punishment I was not allowed to go outside and play, I was not allowed on the computer and to watch TV, and in the 6<sup>th</sup> and 7<sup>th</sup> grade they would take away my mobile phone. As far as the school punishment is concerned, the mark was very important. We could get a bad mark for general behaviour – this never happened to me, but I was “fined” in the 5<sup>th</sup> grade with a very bad mark (1) because I whispered to a colleague the result to a maths problem. I was very upset that day, I cried a lot, but I understood that I was wrong and I did not do that again.”*

**22. T.X.**

*“During my primary school I could not accept the idea of failure and I tried to hide it from my parents. I was in one of the first classes when I got a bad mark in maths. Because of my disappointment, I tried to avoid any other form of critic or punishment and I hid the fact from my parents. I managed to hide everything until my mother asked me directly about it. At that moment I had to come clean. When she found out about my lie, my mother was furious and she lectured me about the consequences of lying. She also forbids me to leave the house for a while. I was really amazed that she was more upset about the lying than about the bad mark I got. Even if at that moment my feelings went from fury to sadness and from pride to humiliation, I’m still feeling the effects of this punishment today. I learned that regardless of the nature of the problem, nothing justifies lying, and that the effects of this lack of trust can be forever.”*

**23. J.N.**

*“My first punishment was during my 1<sup>st</sup> grade when I had to finish for my homework the work we were doing in class – vertical bars. I wanted to do my homework alone, without my mother’s help, I wrote in ink directly, I*

*made a mistake and I tried to erase it, but I tore the page in that place, even if not too bad. For this I was punished by my mother with several hits on the bottom. It all seemed to me to be more important than it actually was. Besides, she also made me apologise to her for tearing a page in a notebook that was mine. After all this time I still blame her because I realised how deeply this situation affected me. I suffer from anxiety, I am always afraid not to make mistakes, I blame myself for things that are out of my control. I am still afraid to take initiative and I always try to consult with her when taking decisions. The second punishment I received was also during my primary school. I was punished for a mean note written by a colleague of mine to another colleague and then thrown in the bin. This note was then retrieved from the bin by a “charitable” colleague and then I was accused of writing and throwing it away. As a result, I was punished to stay in class and discredited in front of the class. I was shocked by this punishment; I did not know what was going on. I was being judged without jury. Only the day after that did the teacher think to check the writing on the note. After they found out I was not guilty, it was very interesting to see that the colleague who really wrote the note was not even punished because her mother was a friend of the teacher. I felt stupid, insignificant and helpless. Now I am revolted and I have a bitter taste about school, equality, justice and respect for another person, even if it is not about a child. If you do not show respect, do not pretend to be respected.”*

**24. E.T.**

*“The worst punishment I received was from my grandmother, who made me sit on the armchair in her room every time I had a fight with my brother or in another situation. I remember a time when I was in the same room with my brother and a friend of ours and we were bickering. My grandmother asked me to sit in that armchair even if I did nothing wrong. She always pretended she was “protecting” me when I was resentful. Every time she made me sit in that armchair I was feeling very frustrated and hateful towards my grandmother. This is proof of a punishment administered without analysing the situation, producing an unfounded injustice. Even at this age I still resent my grandmother. Another punishment used in the family and which was very painful for me was not being allowed to play on the computer for a certain time. I was very fond of the computer and not being allowed to use it was torture for me. I was punished in this way when I got bad marks in school. Also, the fact that my parents forced me to read was a punishment for me and I never liked it. This fact never encouraged me; to the contrary, it made me hate reading. Even now I read only what I am forced to read.”*

**25. A.O.**

*“My father beat me for the first and last time when I was about 4 years old. I used to visit my older cousins and steal toys that I liked. I would take them*

*home without saying a word. My aunt came to visit and saw all the toys from her boys and told my father. He cautioned me not to lie and steal ever again and then he beat me. Since then, I have never stolen anything else and when I am forced to lie, it is very hard for me to do it. That beating influenced me forever.”*

**26. D.P.**

*“The worst marks I got during my first years of school. I think it was very difficult for me to study and I had real problems in Maths. What is even sadder is that my parents had very high expectations from my results. My father, especially, insisted to help me with my homework. I always thought of this as a true and harsh punishment. Besides the fact that I did not like maths and foreign languages, I was looking forward for the hours to pass and be able to go home. But at home the second round of torture would begin: homework. I was terrorised by homework and the subjects I found to be very hard. At that time, punishment meant the harsh words of my parents, colleagues and teachers. Those statements and replies were very painful and stressful!”*

**27. U.F.**

*“When I was 4 or 5 years old I said some very rude words to my grandmother and my mother heard me and she beat me for it. I felt really frustrated and mad at my mother for punishing me. But now I am grateful to my mother for that punishment, because even if it has already been 16 years since then, I have never again said anything rude to my grandmother. There was also another punishment I received around that period. I was together with my cousin and we were both looking after my little sister. We kept playing with the swing and at some point we dropped it out of our hands and it fell together with my sister. My mother was the one that punished me again and she broke a willow twig hitting me over my arms and legs. That was not a pleasant situation and I got marks all over my arms and legs, but later I understood that I was punished because I was not responsible. This punishment and others have helped me become a responsible person and be careful what I’m doing and saying.”*

**28. L.B.**

*“I remember the time when my father punished me and my sister when he found us arguing. He made us stay in the corner for 10 minutes and think about what we did wrong and then apologise to one another. I know that at the time I hated my sister because I thought she was the only one to blame. I felt furious and hated that I had to stay in the corner. On the other hand, this experience has taught me that we must admit when we are wrong and always apologise.”*

**29. M.M.**

*“The person that punished me the most was my mother. When I got bad marks in school or when I was not obedient I was not allowed to go out on weekends. I was really upset with her at those times. All the children were allowed to go out but I had to stay indoors. I was also punished when I was fighting with my brother and my parents usually told me that I was the one to blame for what was going on. I always got the feeling that they loved him more than they loved me and I was jealous.”*

**30. I.U.**

*“As far as I remember my mother punished me when I did not respect the play time and when I was not to be found where she knew I was supposed to be. I was almost 6 years old and my mother would let me play outside our block of flats with the other children. When my mother considered I had wondered around enough, she would come and get me and if she could not find me where I was supposed to be, then she would punish me. At first the punishments were not very harsh – I was not allowed to play outside for a while. But they seemed to be inefficient, because I kept disappearing from the playground and my mother started to punish me by making me sit in the corner on my knees and with my hands raised. She would keep guard so that I could not let my hands down. I did not feel good about being punished, but I knew the reason I was punished and that I deserved it for breaking the rules.”*

In above interviews we can see that punishments were applied at home and in school and that they came from parents and teachers alike. They have been physical or psychiviolence.

The following have been seen as punishment: beating, standing in the corner on one’s knees on corn kernels, insults, humiliations, denigration in front of the classroom, unannounced tests in class just because somebody had inappropriate behaviour, sitting in the corner, writing a word / text a certain number of times, restricting access to TV, computer, mobile phone, forbidding to go out or play with friends.

The following have also been seen as punishments: imposed reading of certain books or doing certain intellectual activities, such as studying a certain instrument; low grades given in school, black dots, penalty cards, prolonged study time or school activities, moralising talk for inappropriate behaviour, critics, scolding etc. Silent treatment to a child, threat of abandonment, displeased parents about school results have produced a lot of sadness, pain and suffering. All these attitudes have been decoded by the child, treated as a worthless person, as being rejected or lacking affection from the parents.

What were the reasons for which they were punished? Punishments inflicted on children/ pupils have most of the time been connected to the lack

of accomplishment in school activities, such as: not doing one's homework, low grades or the failure to attain the standards imposed by school or family. Other causes have been connected to discipline, behavioural problems or attitude.

Have the punishments been effective in administration? A small part of the interviewed persons has considered that yes, they have been effective in the sense that have become more responsible, neat, disciplined, had better results in school, so in other words they have managed to conform to the expectations of parents and teachers. When did they find this out? – only when the punishment was explained, when it came immediately after the inappropriate behaviour or when empathy was used.

On the other hand, most of the interviewed persons consider that the punishment was not effective, it produced anger, fear, humiliation, hate, jealousy, revolt, the feeling that they are misunderstood, sense of discomfort, guilt. The punishment made them feel coerced, controlled, helpless, and insignificant, aggrieved, discriminated against, worthless. Even those who considered punishments as effective in the end admit that they were scared when the punishments were applied.

## **Conclusions**

Punishment is an educational method for children meant to discipline them. Allegations such as “Beating comes from heaven”, “Beating made me a real man” or “When you mother / father beats you, you will be fine” are still frequently used today.

Punishment or sanction is used just as much at school as at home, as a method of exerting external control by imposition (you must!) or force over children / pupils in order to get the modifications desired by adults in behavioural and attitudinal level.

Do punishments accomplish their objectives? On short term they do, in the sense that the child “becomes good” or is silenced and the problem is solved on the spot. The adult justifies his gesture: “look, this is what he needed in order not to be impertinent any more”. I. Kant thinks that punishment applied “while angry” misses the point and determines the child to buckle under as a reflex, making him “act subserviently”. “When physical punishment is frequently repeated they produce some disobedient characters and when parents punish their children for their selfishness they become even more selfish. Rarely the worse people are those who do not comply, but most of the time these are the ones who comply with a well-made observation” (1992:57).

On the long term and especially when punishments are frequent they become habitual and lose their effectiveness and value. According to Andre Berge, as a result of frequent punishment children form “a crust of

indifference” and become “insensitive to the most illuminating arguments”. Also there are educators who, when faced with a small mistake made by a child, remind him of “all the past mistakes”. This “contributes to the development of a guilty personality based on the model which we had the imprudence to build ourselves in order to lay it in front of him” (Berge 1972:215).

As we have seen from above interviews, punishment can have a detrimental effect on the personality of the child / pupil. Why is that? Because they will ignite fury, resentment, revolt etc. Punishment as an educational mean generates fear and not respect. Children will learn to fear the consequences! Also it is a known fact that children / pupils find all sorts of subterfuges or motivations in order not to respect the punishment. “If they are punished children become more cautious, not more obedient or responsible” (Ginott 2006:111). Ginott also states that physical violence “dissolves the guilt too easily: the child, having paid for the bad behaviour, feels entitled to repeat it. (...) Children develop a so-called “accounting” ability towards his bad behaviour. He can afford to be bad and so become indebted and then he pays by weekly or monthly “deposits” of beatings. Periodically they start a fight by inciting the parents. Sometimes they even ask for the punishment or punish themselves” (Ginott 2006:127).

Still, why do we apply punishment in the educational system? On the one hand because they are easy to apply and you get to see the result immediately – the child was silenced or he sits still! On the other hand because adults have seen this as well in their parents, which means that this is a learned behavioural pattern.

Punishment is used with the purpose to discipline the child / pupil. But in order to discipline the child I believe there are needed some clear and decisive limits and rules, applied with kindness.

It is very important in disciplining that the rules be flexible and be redefined according to the age of the child and the existing context. Rigid rules will build a personality which lacks adaptability. Also while establishing the rules and limits it is very important to involve and consult the child so that he can become responsible. He must also be offered alternatives and must be informed of the consequences of stepping over the limits.

Zig Ziglar (2000:69) quotes John Drescher who says that children go through three age phases. The first one is 1-7 years, in which the rules are extremely important. During this period child live in a world of feelings and explorations and not one of rationality. This is the period when they develop from a moral point of view and they need safety and predictability. They must know exactly what is expected of them. Even if they are discontent, constantly testing the limits of adults, they do this in order to “force” the



adults to take over their actions and their deeds. It is very important for children to feel that the parent / the educator is in control.

At this age child do not know how to cope with freedom and control. They do not need them because they don't know how to use them! If the limits are not clear children can become unmanageable and thus they will suffer a lot when they will not understand why other children do not tolerate their attitude and behaviour. They will feel rejected, unloved and will not be able to understand why this is happening to them! This thing will have repercussions over their self-esteem and self-image. Zig Ziglar considers that parents who manage to impose clear limitations at this age will be able to "relax" during the adolescence of their children because these rules will already be interiorized and when the children will be faced with inappropriate challenges their inner voice will be able to say NO.

The second age phase, 8-12 years, is characterised by imitation. During this period, it is more important what the parent or teacher does than what he says.

During this period imitation has more consistency than rules. What can a child learn from the fact that adults, when faced with a problem, start applying punishments by force, intimidation, threat etc.? He will learn that the strong ones have the power and that they are the only ones that can decide. So children, in order to be alright, must conform to this. In turn, they will use force, intimidation, threat, rejection or raised voice in order to solve problems or find solutions because this is what they have seen and learned in school and at home. Punishments make children hostile and vengeful.

How should one act in the situation when punishment is necessary? It must be matched to the deed, it must be clear, decisive and applied on the spot otherwise the child will be confused and he will not understand why he is punished. The issue with punishment is that it teaches the child / pupil only what he is not supposed to do. For example: don't write on the table or you will be punished; don't push your colleague or you will be punished; don't curse or you will be punished etc. So how should one react, what sort of behaviour or attitude should a child / pupil have when his playmates, schoolmates, teachers and parents beat him and humiliate him? Punishment only underlines the mistake, the wrong thing, what should not be done – but children / pupils are in the process of exploration, of testing the limits and controls of adults, of searching for their identity during adolescence. That is why mistakes must be viewed as a source as learning.

If the child makes a mistake or has an undesirable behaviour the adult must talk to him and explain to him what was wrong, what was the reason for which he acted that way, how he sees what happened through the perspective of his age, what he thought, what he felt, what would be the solution, what are the alternatives and what is expected from him. In case the

punishment must be applied then it must happen immediately after the wrong behaviour so that the child must make the connection. It must be a consequence of not respecting the rule – rule which was discussed with the child beforehand. For example, if he did not do his homework he is not allowed to watch TV or go out with friends and as a result he must use that time to do the homework that he did not do at the right time. The child must recognize the consequences of not respecting the rules.

It is also very important to help the child / pupil understand that the punishment is related to his deeds and not to what he is as a person. Otherwise the child / pupil will believe that he is “incapable”, “bad”, “stupid”, that “he can’t do any better, so why bother”. In this way his self-image (“I am worthless”, “I can’t think better”, “I am incapable”, “I can’t do any better”, “I don’t deserve to be loved”) and his self-esteem (lack of confidence in his own powers) will be seriously affected. They will also develop a series of negative behaviours such as skipping school, lying, stealing, alcohol and drugs consumption, etc.

As a result, the child will not be able to assume responsibilities or perform his tasks because he will be afraid – afraid to fail, to do something wrong and be judged again, sanctioned or punished. They can also develop a series of emotional disorders (various fears, terrors, shame, guilt etc.) Repeated punishment may induce in a child the sense that he cannot please and it can cause various blockages so that he will abandon any effort and will try to attract attention in a negative way with all sorts of undesirable behaviours or attitudes.

I think that the question that we as educators must ask ourselves is the following: what is it that our punishments solve? Do we solve the behavioural or attitude problem of the child / pupil or our own problem?

I think we start to dish out punishments when we reach our highest point of helplessness, when we feel we have been overwhelmed in our role as parent or teacher and we cannot manage our emotions, be they fear, guilt or shame and we manifest ourselves with anger, raised voice or hitting.

So on one hand it is about the inefficient management of emotions and on the other hand our own behavioural manifestation has to do with our needs. It is about our need as parents / teachers to feel competent and validated in our role as parent / teacher, to feel in control, to make ourselves heard, to feel respected, appreciated and important. It has to do with self-esteem and self-image.

In case these human needs are not fulfilled they will trigger all sorts of fears and terrors that manifest at behavioural level through anger, nerves, raised voice, hitting, humiliation, denigration, rejection (“leave me alone, can’t you see how busy I am?”).

As a conclusion, our unfulfilled needs as teachers / parents have a direct effect on the needs of our children / pupils (the need to be respected, appreciated, valued, encouraged supported, the need to be heard, seen, understood, the need to be unconditionally loved by our parents, the need for stability and predictability, the need for autonomy, of emotional safety, the need to be accepted etc.). The unfulfilled needs of adults reflect upon important needs of children, generating a lot of pain and suffering. When adults in the process of educating start to use labelling, humiliation, sarcasm, irony or shame motivationally and with good intention in the relation with the child / pupil the only result they get is emotional disconnection.

We can control the behaviour of the child / pupil but we cannot control his thinking and feelings. The need of the child for safety, acceptance and appreciation makes him disciplined, obedient, but at the same time resigned, oppressed and subordinated.

I believe that discipline is based on a strong connection between parent / teacher and child / pupil, which means getting on the same page with the needs of the child. This connection develops in children the ability to learn, understand, respect and accept the limits and rules that were mutually agreed. In order to do this, as an educator you need to be patient, empathic and kind during the educational process. It is very important that when we offer children alternatives they should feel that we are on their side and that we only want to meet their most important needs when we have expectations from them.

### **References:**

- Ausubel, D.P., Robinson F.G (1981). *Învățarea în școală*, București: Editura Didactică și Pedagogică.
- Berge, A. (1972). *Copilul dificil*, București, Editura Didactică și Pedagogică.
- Campbell, R. (2007). *Educația prin iubire*, București: Editura Curtea Veche.
- Ginott, G. H. (2006), *Între părinte și copil*, Editura Humanitas, București
- Kant, I. (1992). *Tratat de pedagogie*, Iași: Editura „Agora” S.R.L.
- Skinner, B.F. (1971). *Revoluția științifică a învățământului*, București: Editura Didactică și Pedagogică.
- Thorndike, E.L. (1983). *Învățarea umană*, București: Editura Didactică și Pedagogică.
- Zglar, Z. (2000). *Putem crește copii buni într-o lume negativă*, București: Editura Curtea Veche.

# IMPLEMENTATION OF AUGMENTED REALITY TECHNOLOGY IN NATURAL SCIENCES LEARNING OF ELEMENTARY SCHOOL TO OPTIMIZE THE STUDENTS' LEARNING RESULT

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**Abstract:** *In this research, the researcher developed new innovation in natural sciences learning of elementary school by implementing augmented reality technology. The method that used in this research was research and development method based on Borg and Gall theory which consists of ten stages: 1) research and information collecting, 2) planning, 3) develop preliminary form of product, 4) preliminary field testing, 5) main product revision, 6) main field testing, 7) operational product revision, 8) operational field testing, 9) final product revision, 10) dissemination and implementation. The result of this research is learning media of natural sciences learning in elementary school by utilizing augmented reality technology. Based on the implementation of experiment, it is obtained the data that learning process using augmented reality which is developed can optimize the students' learning result.*

**Keywords:** *Augmented Reality; Learning Result; Research and Development; Natural Sciences of Elementary School; Learning Media;*

## INTRODUCTION

Based on the result of PISA (2009), Indonesia is on the second lowest rank from the 65 countries. There are three aspects that were researched by PISA, they are: the ability of reading, mathematics, and science. The result showed that science is on the lowest rank. This is apprehensive that aspect which is measured by PISA is including the special skill in science field that is very needed in facing the global era challenge. In this case, science learning should be revised to be better. From those reasons, it becomes challenge for sciences teachers to teach science maximally to the students. One of the efforts is revising the learning system. In education field, science learning is called as natural sciences learning. Natural science (IPA) is collection of knowledge that is arranged systematically about natural

indication. Natural science development is not only about fact, but also scientific method and scientific attitude. It is hoped that natural science education can be tool for students to learn surrounding nature. Also, the continually prospect development can be implemented in daily life. (Depdiknas, 2008).

Based on the result of survey in Surakarta, it is showed that the score of natural science is lower than the others subjects. In conducting examination, the score of natural science is in the lowest rank compared with other subjects. On the national examination in academic year of 2013/104, the average of Indonesian Language is 8, 26, mathematics 7, 38, while natural science is 7,29. Then, on the national examination in academic year of 2014/2015, the score of natural science has significant decreased with average 62, 43. Starting from that, it is a challenge for teachers to be able to convey the science lessons as much as possible to the students. One effort that can be done to maximize learning outcomes is by improvements in the learning system.

Learning outcomes of students are influenced by internal factors and external factors. Internal factors including the students' interest and willingness in managing the material received. External factors include the availability of media and the presence of a teacher in the learning process. Learning is a process of interaction between students and teachers, both in the classroom and outside of classroom by using learning source and learning media.

Learning resources can be obtained from teachers, books, or printed media and other audio media that are expected to gain a wider knowledge. Progress in education will not happen without improving the learning process used. In other words, the quality of education is strongly influenced by the quality of learning. Therefore, the lessons to be implemented should be adjusted to the mandate of Government Regulation No. 19 of 2005 on National Education Standards, one of the standards to be developed is the process standard.

Then, to obtain good results in the learning process, it should be supported by the appropriate media that, because the learning media is an intermediary or the introduction of good communication and fun between teachers with students. The students' spirit will arise when the atmosphere is so fun and learning will be effective when they are happy in learning. Teachers' ability in designing and implementing learning media is the key to the success of fun learning process.

Grouping Learning media are very diverse, Seel and Glasgow (1990: 181-183) classify the media into two broad categories: traditional media and latest technology media. Learning media with modern technology usually involves emerging technologies such as cassette playback, video, recordings. While traditional media can be created manually by the teacher or containing

classic elements by using materials and tools that are easily found in the environment. Teachers must be creative to create learning media in order to make learning condition which is educative, effective, and optimally efficient.

In this global era, the main multimedia is in form of ICT (Information Technology and communication) becomes a fundamental requirement in determining the quality and effectiveness of the learning process. According to Alhamuddin (2010) the process of learning using multimedia makes the learning is more deeply and fun, while for teachers the utilization of media is easier and very helpful in the process of effective learning. From Dryden and Vios (2003) study, it can be concluded from the results of their research that in successful education, self-image was more important than the learning materials. Thus, the concept of future education is directed to how to excite learners to learn in a fun way.

Nowadays, one of the trending technologies is *Augmented Reality*. Suryawinata (2010) stated that *Augmented Reality* is combination between virtual and reality world made by computer. The virtual object can be text, animation, 3D model or video that gathered with the real environment, so that the users can feel the virtual object is in their environment. *Augmented Reality* belongs to new technology branch. However, the development is fast. So far, this technology is used in various fields, especially in military and advertisement. And now, it started applying in education field. Elango (2015) in his research showed positive result in implementing *Augmented Reality* on mathematics learning. Then, Chiang, Yang & Hwang (2015) stated that there is increasing of students' understanding in learning science through media based *Augmented Reality*. Also, research by Kucuk, Zilmas, and Goltas (2015) showed positive result in utilization of *Augmented Reality* in learning language.

In short, object can be seen more real through *Augmented Reality*. Therefore, it is very interesting if it is applied in learning process, especially in natural science, for it has many topics that can be learned through picture or visual. Besides, *Augmented Reality* can be accessed via OS Android in phone facility.

Therefore, in this research, the researcher developed new innovation in natural science learning in elementary school. It is hoped that the problems above can be solved. The researcher developed assignment worksheet that utilize technology by using *Augmented Reality* system and can be accessed via android.

## **RESEARCH METHODOLOGY**

Research design that was conducted is Research and Development (RD) that developing assignment worksheet of Natural science in elementary school based multimedia android using *Augmented Reality*. The development that conducted is using procedural model that adapting Borg and Gall model development.

The development according to Borg and Gall (1983) consists of ten steps: (1) research and information collecting (2) Planning (3) Develop preliminary form of product (4) Preliminary field testing (5) main product revision (6) main field testing to validate development product in large scale and compared with control product (7) operational product revision (8) operational field testing. It is validation test towards operational product that produced (9) Final product revision (10) dissemination and implementation product.

Respondent in this research is class 5 elementary school students in Surakarta. In the trial of small scale, the product is tested to 10 students and 1 teacher. In the trial of middle scale, the product is tested to 25 students and 2 teachers. Then, in the trial of large scale, it is tested to six classes (control class and experiment class). Instruments that used in this development research are questionnaire, questions, validation sheet, assessment sheet between students and observation sheet. Data processing in this research is conducted using descriptive analysis, including: expediency analysis and analysis of learning test result data. The method of collecting data in this research is questionnaire technique to know the expediency product (assignment worksheet based android multimedia) from topic experts, language experts, learning experts, media experts, and also the teacher and students' respond, learning result assessment, psychomotor, and behavior. Test technique to assess cognitive learning result, and assessment technique inter students to psychomotor and behavior. Before tested, product is validated by 9 experts using Aiken formula.

## **RESULT AND DISCUSSION**

### **Research and Information Collecting**

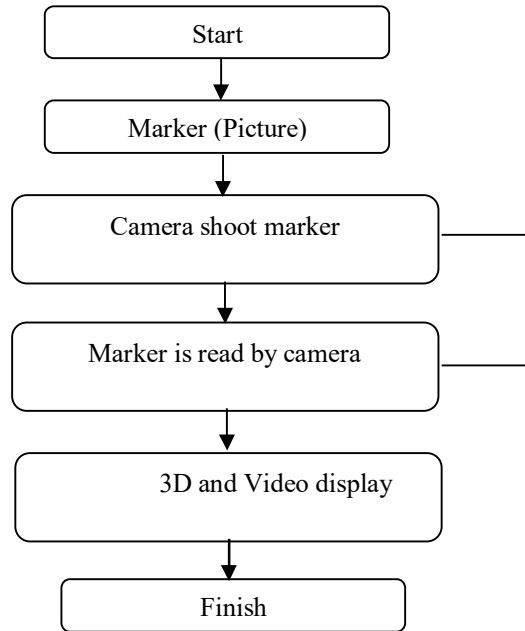
Activities conducted on the needs analysis in the form of field studies by giving questionnaires to students and teachers to the needs of learning media, learning condition in the classroom, the availability of learning materials, interviews with students and teachers, and analysis of national examination results in the last three years and daily test results.

In this preliminary research, it is found that the learning result of natural science is not yet optimal, there are some topics that are difficult to be understood by the students, especially the topic that need analysis process to an image and cycle. Thus, teachers need natural science learning media

that appeals to learners and facilitates the students' understanding in learning natural science.

### **Planning**

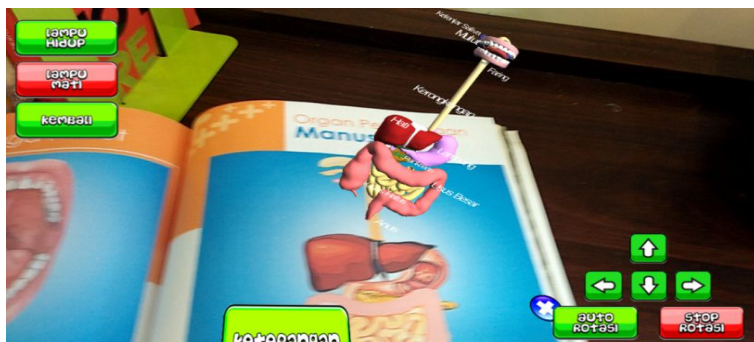
In this stage, the researcher design learning media based android multimedia by utilizing augmented reality based on KTSP curriculum.



Picture 1. *Augmented Reality Mechanism*

### **Develop Preliminary form of Product**

Researchers make learning media based on augmented reality technology based on the 5th grade of elementary school. The resulting product has been validated by 9 experts covering material experts, media experts, learning experts, linguists, and education practitioners. The results obtained that the media developed is valid with the acquisition of validation value Aiken 0.9528.





Picture 2. Display of Augmented Reality



Gambar 2. Display of Application in android

### Preliminary Field Testing

In preliminary field testing stage, product was tested to 10 students and 2 teachers. The aim of preliminary field-testing was to measure readability of product that was media. Furthermore, this test was conducted by distributing questioner to the students and teachers after they used the product. The result shows that the quality of developed media was average. The data analysis shows that students mean score in evaluating product is 83.96, and evaluation product from teacher is 81.25.

Tabel 1. The Result of Preliminary Field Testing

No	Evaluation Aspect of Quality	Students		Teacher	
		Percentage (%)	Category	Percentage (%)	Category
1.	Content	86,67	Good	83,33	Average
2.	Language	81,67	Average	83,33	Average
3.	Display	84,17	Average	79,16	Average
4.	Abandonment	83,33	Average	79.16	Average
	Mean	83,96	Average	81,25	Average

### Main Product Revision

Main product revision was done to revise the product by considering on the result of preliminary field-testing. Revision was conducted from students' evaluation and teachers' evaluation toward the product. The revision includes improving the quality of sensitivity marker in augmented reality and others inappropriate terms.

### Main Field Testing

In this stage, product was tested into larger scale. Developed media was tested into one class with the total number of students was 25 students and 2 teachers. The result shows that the quality of media is good. Students' evaluation score was 85.8 and teachers' evaluation score was 89.6.

Tabel 2. The Result of Main Field Testing

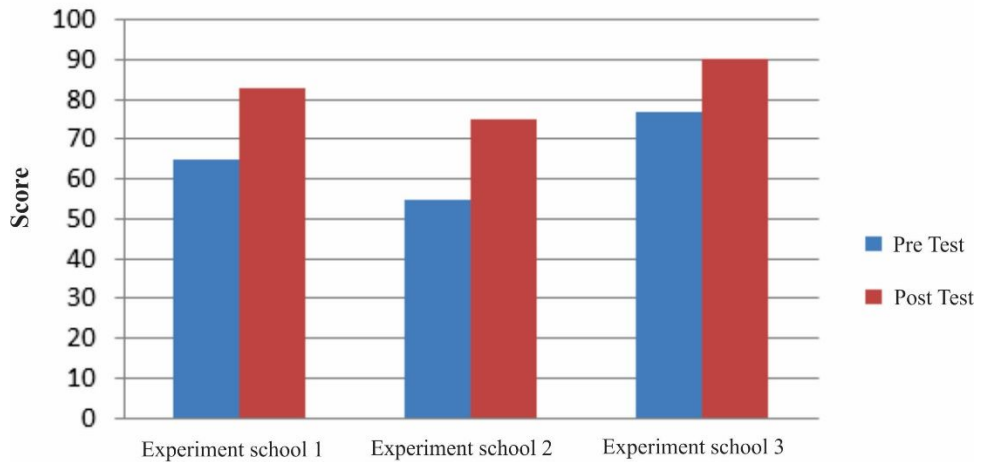
No	Evaluation Aspect of Quality	Students		Teacher	
		Percentage (%)	Category	Percentage (%)	Category
1.	Content	86,74	Good	91,67	Good
2.	Language	89,77	Good	91,67	Good
3.	Display	88,26	Good	91,67	Good
4.	Abandonment	87,5	Good	95,83	Good
	Mean	88,07	Good	92,71	Good

### Operational Product Revision

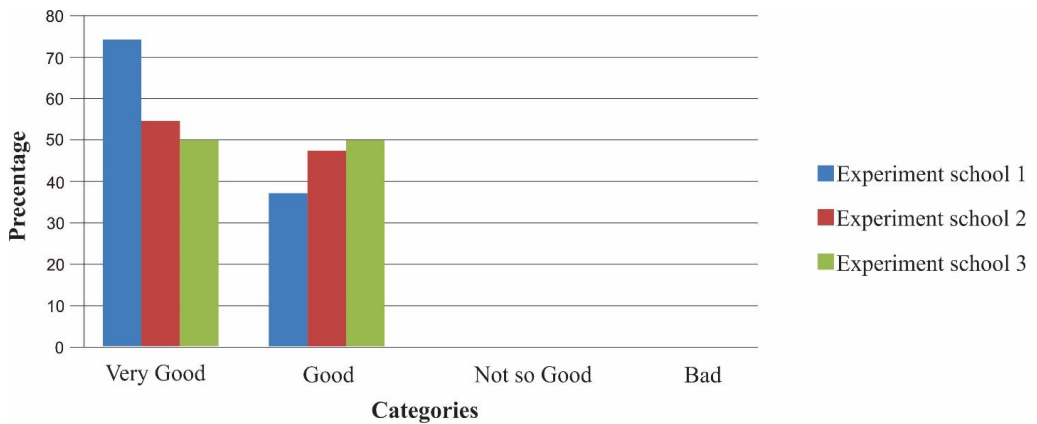
The quality revision and improvement of the product was done based on the result of main field-testing. In this stage, the quality revision and improvement was conducted by adding the explanation voice on augmented reality display.

### Operational Field Testing

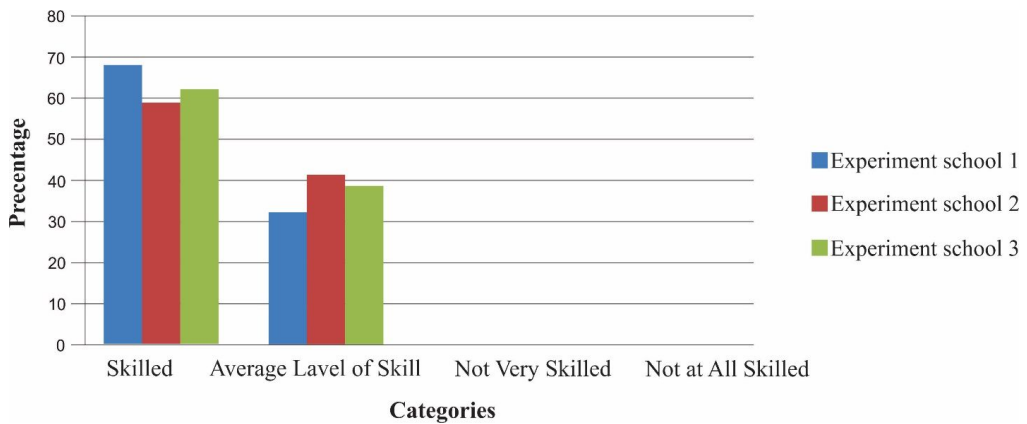
Operational field testing of developed media was conducted in 3 sample schools. The result of implementing the developed media in learning process shows the optimal result. It can be showed from the improvement of students learning outcome in some aspects such as cognitive, affective, and psychomotor. The following tables show the improvement score of students' learning outcome on.



**Object**  
Graphic 1. Mean Score of students' Cognitive Score



Graphic 2. Students' Learning outcome in Affective Aspect



Graphic 3. Students' Learning Outcome in Psychomotor Aspect

### **Final Product Revision**

final product revision was conducted based on the result of operational field testing that shows that the quality of product is appropriate and relevant to be implemented and disseminated.

### **Dissemination and Implementation**

After validation, testing and revision leaning media of science using augmented reality is appropriate and relevant to be implemented in learning process. The next stage is disseminating and implementing product. Furthermore, the developed product is presented in learning innovation forum and distributed to schools in Surakarta. Later on, play store is used to enlarge the distribution of produce and easy teachers and students to access and download the product.

### **Conclusion**

In this research, researcher developed learning science media by using augmented reality technology. The product was validated by 9 experts including media expert, learning expert, language expert and education practitioners. The result of validation shows that the developed media score was 0.9528. The result of students' evaluation and teachers' evaluation toward the product was 88.07 % and 92.71%. It means that the developed product is good and relevant to be implemented in learning process. Moreover, the result of field testing also shows significant result. The result of field-testing shows that the developed media can improve students learning outcome on science viewed from cognitive aspect, affective aspect and psychomotor aspect. In the last stage of this development research, researcher disseminates the product to the elementary school teachers in Surakarta, distributes and provides download facility of product in playstore.

### **References**

- Arikunto, Suharsimi. (2013). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta : Rineka Cipta.
- Chiang, T. H. C., Yang, S. J. H., & Hwang, G. J. (2014). Students' online interactive patterns in augmented reality-based inquiry activities. *Journal Computers & Education*, 78, 97-108.
- Dimiyati & Mujiono. (2006). *Belajar dan Pembelajaran*. Jakarta: Rineka Cipta.
- Depdiknas. (2008). *Kurikulum Tingkat Satuan Pendidikan*. Jakarta: Dikmenas. Depdiknas.
- Education For All Global Monitoring Report. (2011). Diperoleh 10 April 2016 dari

- <http://www.Unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/pdf/gmr2011-efa-development-index.pdf>
- Elango, P. (2013). *Sistem Pemulihan Lembaran Kerja Bagi Nombor Negatif Berasaskan Realiti Luasan (AR2WN2)*. (Phd), Universiti Kebangsaan Malaysia, Bangi.
- Gall, M.D., Gall, J.P. & Borg, W.R. (2003). *Educational Research an Introduction 7 th Ed*. Boston: Pearson Education, Inc.
- Hamalik, Oemar. (2009). *Proses Belajar Mengajar*. Bandung: Bumi Aksara.
- Harapan, Nazarudin Syafaat. (2012). *Pemograman Aplikasi Mobile Smartphone dan Tablet PC Berbasis Android*. Bandung: Informatika.
- Harlen, W. (2006). Purpose and procedures for assesing science process skill. *ProQuest. Assesment in education*, 6 (1), pp 129-144.
- Harre, Rom. (2002). *Cognitive science: A philosophical introduction*. London: SAGE Publications.
- Irham, M. dan Wiyani, N. A. (2013). *Psikologi Pendidikan: Teori dan Aplikasi dalam Proses Pembelajaran*. Yogyakarta: Ar-ruzz Media.
- Isjoni. (2013). *Cooperative Learning*. Bandung: Alfabeta.
- Isnainingsih & D. S. Bimo. (2013). *Penerapan Lembar Kegiatan Siswa (LKS) Discovery berorientasi Keterampilan Proses Sains untuk Meningkatkan Hasil Belajar IPA*. *Jurnal Pendidikan IPA Indonesia*, 2 (2), 136-141.
- Kucuk, S., Yilmaz, R. M., & Goktas, Y. (2014). Augmented Reality for Learning English: Achievement, Attitude and Cognitive Load Levels of Students. *Journal Egitim Ve Bilim-Education and Science*, 39 (176).
- Majid, Abdul. (2007). *Perencanaan Pembelajaran*. Bandung: Remaja Rosdakarya.
- Nazarudin. (2007). *Manajemen Pembelajaran*. Yogyakarta: Teras.
- Programme for International Student Assessment (PISA). (2009). *PISA 2009 Plus Result Performance of 15-years-old in reading, mathematics and science for 10 additional participants*. Diperoleh 10 April 2016 dari <http://nces.ed.gov/survey/pisa>.
- Belawati, Tian, dkk. (2003). *Pengembangan Bahan Ajar*. Jakarta : Universitas Terbuka.
- Leach, J., Driver, R., Millar, R., & Scott, P. (1997). A study of progression in learning about 'the nature of science': Issues of conceptualisation and methodology. *International Journal of Science Education*, 19(2), 147-166.
- National Research Council. (2012). *A framework for K-12 science education: Practices, crosscutting concepts, and core ideas*. Washington, DC: The National Academies Press.
- Stiggins, R. J. (2005). *Student-involved assessment for learning (4th ed.)*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Stiggins, R. J., & Conklin, N. F. (1992). *In teachers' hands: Investigating the practices of classroom assessment*. Albany, NY: State University of New York Press.

- Sagala, Syaiful. (2010). *Konsep dan Makna Pembelajaran*. Bandung: Alfabeta.
- Sanjaya, Wina. (2013). *Penelitian Pendidikan, Jenis, Metode dan Prosedur Pendidikan*. Jakarta: Kencana Prenada.
- Sri Sulistyorini. (2007). *Model Pembelajaran IPA Sekolah Dasar dan Penerapannya dalam KTSP*. Yogyakarta: Tiara Wacana.
- Sudarwan Danim. (1995). *Media Komunikasi Pendidikan*. Jakarta: Bumi Aksara.
- Sudjana, Nana. (2004). *Dasar-Dasar Proses Belajar Mengajar*. Bandung: Sinar Baru Algensindo.
- Sugiyono. (2015). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta. (2015). *Metode Penelitian & Pengembangan Research and Development*. Bandung: Alfabeta
- Susanto, Ahmad. (2013). *Teori Belajar dan Pembelajaran di Sekolah Dasar*. Jakarta: Kencana Prenada Media Grup.
- Samatowa, Utsman. (2006). *Bagaimana Membelajarkan IPA di Sekolah Dasar*. Jakarta: Depdiknas.
- Majid, Ambul. (2013). *Strategi Pembelajaran*. Bandung: Remaja Rosdakarya.
- Mulyasa. (2010). *Kurikulum Tingkat Satuan Pendidik (KTSP)*. Bandung: PT. Remaja Rosdakarya.
- Nurina, Irma. (2015). *Penerapan Lembar Kerja Siswa berbasis Penugasan Terbimbing untuk Meningkatkan Motivasi dan Minat Belajar Siswa di Sekolah Dasar*. (Tesis). Universitas Negeri Semarang, Semarang.
- Treagust, D. F. & Duit, R. (2008). Conceptual change: a discussion of theoretical, methodological and practical challenges for science education. *Cultural Studies of Science Education*, 3, 297-328.

## THE RELATIONSHIP BETWEEN THE TYPES OF COMMUNICATION OF THE TEACHER AND THE RESULTS IN THE LEARNING OF THE STUDENTS, ON THE INTERNALITY-EXTERNAL DIMENSION

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**Abstract:** *The quality of the communication processes within the class depends on both the teacher and the students, in either case both being responsible for optimizing and stimulating classroom communication. The teacher, however, has primarily the responsibility to develop the classroom's communication environment, which is about informational and interpersonal exchange between teacher-student, student-teacher, teacher-class, class-teacher, student-student. Thus, we aim in this study for the determination of the factors that contribute to the use of a means of communication within the class, focusing on the dimension of internality - externality of the personality of the teaching staff and the students.*

**Key words:** *teacher; beliefs; students; educational communication; personality;*

### Introduction

Educational communication supports the achievement of the educational act as a whole, regardless of its contents, levels, forms or partners involved in the process. We can center this communication on acquiring knowledge, skills and attitudes, we can do it through various forms, formal or informal.

Inter-human communication activity, when is properly taught, manifests itself in concrete ways, taking into account content, intentions and functions. Such communication maybe: communication through language; nonverbal communication through symbols, visual communication, paraverbal communication.

Each teacher has certain beliefs and concepts about the class of students, on how it should be run and organized. Many studies have been developed on the management of the class of students (Dan Potolea, Emil Paun, Romita Iucu, Ioan Jinga Elena Joita, Emil Stan, Cătălina Ulrich, etc.),

all underlining the idea that the teacher as a school manager has to constantly focus his attention on the learner, the student. In the relationship of influencing students through communication, the teacher can exert constructive role behaviors that have a positive impact, destructive that have a negative impact and neutral that does not have a real impact on the target or receiver. Teachers' intentions and behavioral influences can easily be traced to successfully completing or failing student activity. The communicative style of the teacher, his or her way of communicating with the pupils is often reflected, as Liliana Ezekil (2002, p.155) puts it, in: the quality of the student classroom interactions the teacher manages; receptivity to the pupil as an interlocutor; the way the teacher facilitates students' process of receiving, understanding, processing messages; the way the teacher directs and controls the process of creating messages by students; the way student-student communication is stimulated; what the professor thinks about effective communication; what the teacher values in his interaction with students.

A subtle but effective form of social-educational influence that teachers use in teacher-student communication is persuasion. In this context, persuasion aims to determine the receiver, the person or the group to change attitudes and behaviors, unforced by others. Unlike the socio-educational influences and the messages communicated by the teacher in the didactic situation, students can adopt positive, negative or neutral attitudes. To have an attitude towards something or someone, it is foremost about reacting affectively, evaluating the stimulus with positive or negative emotions, and secondly the attitudes always have a behavioral component that predisposes the subjects to act in a certain way towards the object that influences them and, last but not least, a strong, cognitive component, because what the person feels about an object depends, to a certain extent, on her views about that stimulus.

We must also take into account the fact that communication is a fundamental component of psychosocial interaction; it is a continuous exchange of different messages between teachers and students, meant to achieve a sustainable inter-human relationship, to influence the continuation or modification of individual or group behavior.

Thus, in the present study, we have tried to determine the factors that contribute to the selection of a means of communication within the class, focusing on the classroom's style of leadership, on the internality-externality dimension of the personality of both the teacher and the students, the length of service of the teachers and the class they are working with.

We started from the hypothesis that there are significant differences in the appreciation of the teacher's communication style, between the students with good learning outcomes and those with poor results.



## **Methodology**

To test this hypothesis, we compiled a sample of 46 teachers with a work experience of between 12 and 36 years. We mention that the teachers come from 27 schools in Arad County and the approach for collecting their answers was the participation in a training course, which demonstrates a common point, namely the valorization of the continuous learning and the awareness that there will always be an aspect which needs to be improved. It is worthwhile to investigate why this aspect should not even be the educational communication.

As far as student selection is concerned, the initial task of teachers was to indicate the best and the lowest student in the class according to the average grades to date. Through this we have tried to eliminate the subjectivity in choice and preferences for certain students. We consider that this task has been efficiently achieved, given the significant statistically differences between the group of good students and weak students. Further on, the survey was based on the confirmation of the teachers and the selected students were questioned for data collection.

## **Tools and working procedure**

**Rotter's locus of internal-external control survey (1966).** Rotter believes that the fundamental dimension of the personality that influences daily behaviors is the way the person perceives the source of recompense (positive reinforcement) or sanctions (negative reinforcement), that is, how he establishes the link between this system and his own behavior. It demonstrates the existence of two categories of individuals: those who believe that positive or negative reinforcements derive directly from their own actions and those who believe that those reinforcements depend on external forces independent of their mode of action. The first category of subjects, including those who consider themselves responsible for everything that happens to them, has an *internal locus of control*, and the second category of people who identify the source of events as external have an *external locus of control*. Thus, Rotter considers the internality-externality combo, a fundamental dimension of personality, a significant variable in the behavior of a person.

A person who believes that the success or failure of his/her actions in different social actions is due to his or her own person (skills, experience, voluntary effort or their absence) has an internal control, assuming responsibility for their actions and consequences. Such a person will have a tendency to repeat this behavior in similar situations. On the other hand, a person who attributes the causes of his successes or failures to external aspects has an external control, with a lower responsibility for his own

actions. Research reveals interpersonal differences about the level of external or internal control of personality due to different ways of attributing the causes of one's behavior or the behavior of others.

To measure the fundamental dimension of the personality - external and internal control - Rotter developed the questionnaire for the assessment of the locus of control. The test contains 29 items, for the teachers the variant a), b) was applied, and for the students the "yes", "no" option was applied. The training for the Rotter questionnaire consisted in circling the variant with which they agree from two variants a) or b), which allows differentiation between internal and external. As far as the students are concerned, they were asked to answer "yes" or "no" to the 29 items of the questionnaire, the completion of the questionnaire being accompanied by explanations and clarifications, where appropriate.

### **Results**

The study on communication in the class of students was based on a correlational experiment. The investigated subjects were divided into three experimental groups: teachers, good students and weak students, and the descriptive statistics are presented in Table 1. The data collection tools were presented in the study methodology, and what is also worth mentioning is that the pupils have been given a version of the locus of control scale customized on the age of the group.

The correlations sought were between: a) locus of control and the way of communication, the leadership style of teachers, and b) locus of control and appreciation of the educational communication by the good and the weak students.

The average marker of educational communication demonstrates that bilaterality is the way of communication characteristic of the sample of teachers, with a standard deviation of only 0.37 compared to that. The marker of locus of control for teachers, according to the sampling: 0-13 internal and 13-23 external, falls within the limits of externalism, average = 15.48. This means that the questioned teachers have external factors as a way of interpreting the causality of the events. The average marker of the leadership style for teachers is 1.91 and the standard deviation is 0.41, which demonstrates the participatory way in conducting educational activities. The low standard deviation shows that this style is a representative feature of the sample.

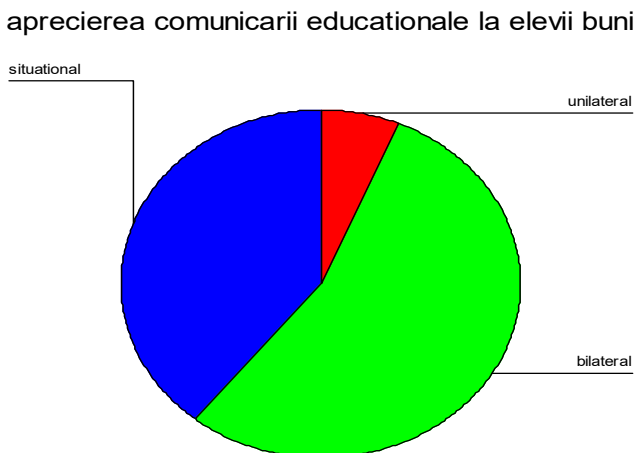
We can see that the appreciation of educational communication in good students differs from that of students with poor results in class. Good students consider that the teacher communication's style is bilateral, average 2.33 with a standard deviation of 0.60, while weak students deem a unilateral communication, average 1.35, standard deviation of 0.48.

The marker locus of control - good and weak students, again registers differences. If the good students have a locus of internal control, the average of 11.65 (limits 0-13), we cannot say the same about weak students, which are characterized by a locus of external control, the average 16.15 (limits 13-23). This means that the questioned weak students have external factors as a means of interpreting the causality of events, and good students give priority to internal factors.

By switching to the statistical data for the sample of students, we may notice a qualitative difference of hetero-appreciation on the marker of the educational communication, both towards the teacher and within the sample, between the good and the weak learners. It is noticed that the percentage of unilateralism is kept constant, 6.5%, which shows the accuracy and convergence of opinions regarding this rather negative aspect of the educational process, namely, the one-way communication, from teacher to student. The proportions in the appreciation of the bilateral and educational style are also maintained. The conclusion is that the type of educational communication in the case of good students denotes facilitating aspects, that the students appreciate this dimension correctly, the influence of the style of communication on the good pupils having a positive impact.

Figure 1 presents graphically the frequencies of hetero-appreciation of educational communication in good students

Figure 1 – The frequencies of hetero-appreciation of educational communication in good students

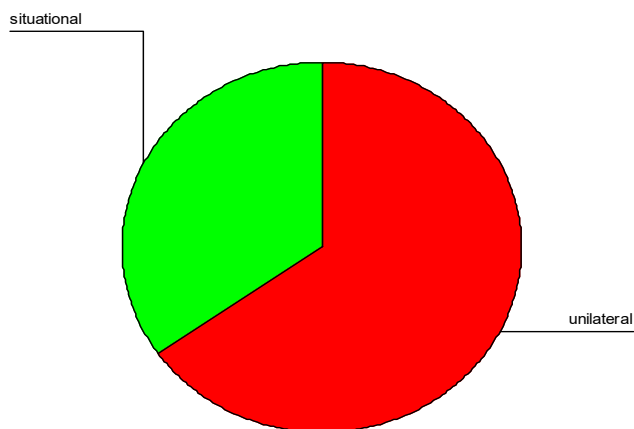


However, we cannot say the same thing about the opinion of weak students. The appreciation of this category of subjects differs significantly from both teacher self-appreciation and the appreciation of the good students in learning. There is no case in which a poor student appreciates the teacher in terms of bilaterality. A very high percentage of 65% (compared to 6.5% for both teachers and students) considers that the teacher is unilateral. The appreciation may be subjective if we consider the previous correspondence, but it can be true if the relationship of the teacher with the weak learners is customized, based on a directed communication in which reprimand prevails. This aspect is worth exploring in a future study.

The 16% percentage, which considers the teacher to be situational in communication, may have to do with the fact that weak students feel ignored during classroom activities, focusing on them only on homework evaluation and assessments. Of course, there is also an explanation that "He has something with me", which again demonstrates possible discrimination within the class.

Figure 2 – The frequencies of hetero-appreciation of educational communication in weak students

aprecierea comunicarii educationale la elevii slabi



The fundamental dimension of personality that influences everyday behaviors and implicitly educational behavior is how the person perceives the source of recompense or sanctions, that is, how he/she establishes the link between this system and his/her own behavior. The internality-externality dimension of personality becomes a significant variable of a person's behavior, influencing the way the teacher attaches the causes of his

successes and failures either to internal factors (dispositional assumption) or to external factors (situational assumption).

Figure 3 shows the distribution of teachers on this dimension. The fact that teachers are 84.8% external is a good thing from the perspective of getting in touch with good students.

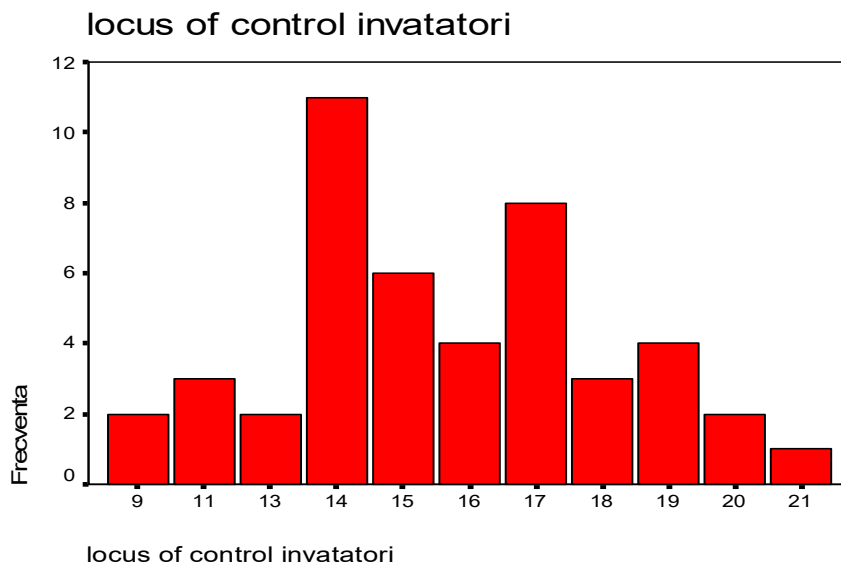
Table 1 –Locus of control marker in teachers

<b>Locus of control teachers</b>	<b>SCORE</b>	<b>Frequenc y</b>	<b>Percentage %</b>	<b>Cumulative percentage%</b>
<b>INTERNAL</b>	9	2	4.3	4.3
	11	3	6.5	10.9
	13	2	4.3	15.2
<b>EXTERNAL</b>	14	11	23.9	39.1
	15	6	13.0	52.2
	16	4	8.7	60.9
	17	8	17.4	78.3
	18	3	6.5	84.8
	19	4	8.7	93.5
	20	2	4.3	97.8
	21	1	2.2	100.0
<b>Total</b>		<b>46</b>	<b>100.0</b>	

This means that teachers attribute the cause of school success, to students' own resources, and they only intervene by directing activity to achieve goals. However, when dealing with weak learners, it is not a positive thing, because there is no question of the effectiveness of their own educational communication. School failure is attributed to situational factors, namely student resources.

The percentage of 15.2% of internal teachers is a guarantee of awareness of their own limitations in the educational process, which optimizes learning. It would be preferable for teachers to have a higher level of internality in order to be able to effectively ignore the interference of subjectivism, which inevitably appears in the assessment of students.

Figure 3 – Teachers distribution on the locus of control marker



Switching to the sample of students, it is worth mentioning that Schopler and Layton (1975), studying success and school failure, demonstrate that teachers tend to explain school failure through internal dispositional factors rather than external factors and school success through situational factors. As a way of protecting one's self, a poor student will

Locus of control good students	SCORE	Frequency	Percentage%	Cumulative Percentage%
<b>INTERNAL</b>	8	4	8.7	8.7
	9	7	15.2	23.9
	10	4	8.7	32.6
	11	7	15.2	47.8
	12	7	15.2	63.0
	13	7	15.2	78.3
<b>EXTERNAL</b>	14	5	10.9	89.1
	15	2	4.3	93.5
	16	2	4.3	97.8
	17	1	2.2	100.0
	Total	46	100.0	

Table 2 – The locus of control marker in good students

Indicate external causes related to the teacher, school failure, and similarly, a good student will indicate internal causes to school success, thus reinforcing self-esteem. This is an explanation for the fact that 78.3% of the good students have a locus of internal control and 91.3% of the weak students are external.

Table 3 – The locus of control marker in weak students

<b>Locus of control weak students</b>	<b>SCORE</b>	<b>Frequency</b>	<b>Percentage%</b>	<b>Cumulative Percentage %</b>
<b>INTERNAL</b>	9	1	2.2	2.2
	10	1	2.2	4.3
	11	1	2.2	6.5
	13	4	8.7	15.2
<b>EXTERNAL</b>	14	6	13.0	28.3
	15	5	10.9	39.1
	16	4	8.7	47.8
	17	8	17.4	65.2
	18	8	17.4	82.6
	19	4	8.7	91.3
	20	2	4.3	95.7
	21	2	4.3	100.0
	Total	46	100.0	

Figure 4 and Figure 5 show the frequencies distributed by the weak and good students, on the locus of control.

Figure 4 – Distribution of good students on the locus of control marker

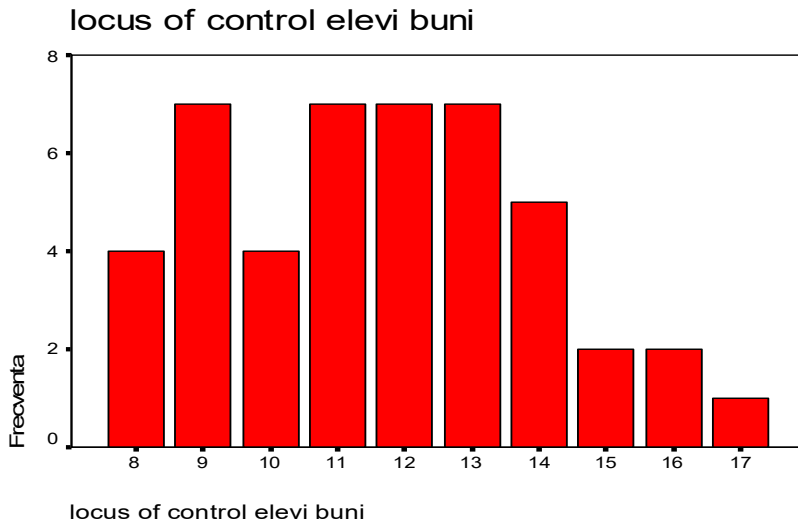
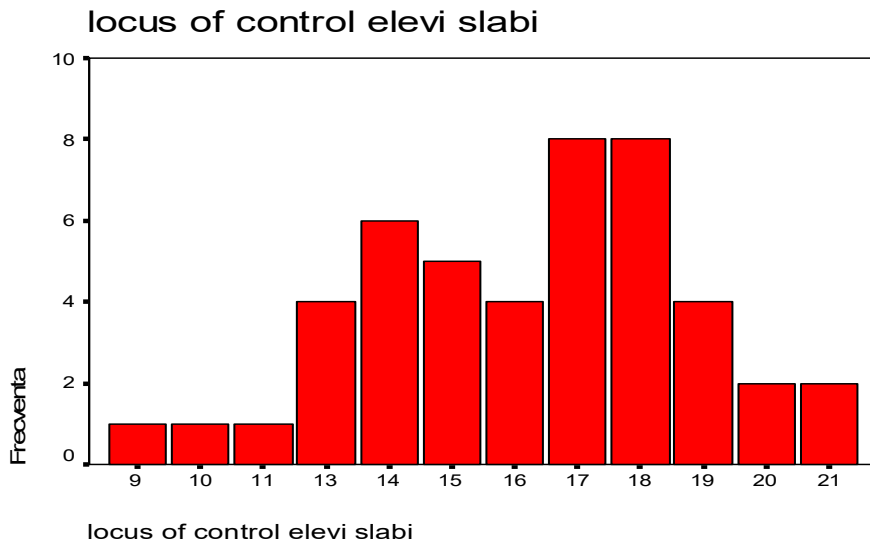


Figure 5 – Distribution of weak students on the locus of control marker



By placing the respondents' results on the marker locus of control on a scale, we can assume that good students are 78.3% internal, followed by teachers, 15.2% and weak students, 8.7%. This is positive thing from the point of view of the teacher-student relationship, given that during the succession of the primary education, pupils form certain capacities and personality traits that will further on influence adult life.



## Discussions

The correlations obtained are significant at a threshold of  $p < 0.05$  and  $0.01$  and we will analyze each one to see if the assumptions made are validated.

1. Educational communication correlates positively significantly with the locus of teacher control,  $0.376$  at a threshold  $p < 0.05$ . This means that the more internal the teachers are, the more bilateral the communication is and at a higher degree of externality, the teachers are more unilateral in the way of communication. An internal locus of control implies giving preference to its own provisions, a deeper awareness of its own competencies and limits, a facilitating context for active listening, which makes the communicative process a bidirectional act. An external locus of control causes the causal attributions of educational processes to be external, the teacher considering that he cannot do much to change the course of the events, placing the responsibility on the student. In this case the communication becomes unilateral, the teacher giving the tasks without taking into account the feedback from the students.
2. There is a significantly positive correlation between the educational communication and its perception by the weak pupils at learning  $0.379$  at a threshold  $p < 0.01$ . This demonstrates the impact of the style of communication on weak learners.
3. There is a significant negative correlation of  $-0.568$  at a threshold  $p < 0.01$  between the locus of control of the weak students and the appreciation of the educational communication. The higher the degree of internality of the weak student, the more unidirectional the teacher will be in communication, and the more external the weaker pupil is, he will appreciate the educational communication as more permissive.
4. There is a significant negative correlation between the locus of control of good students and the appreciation of their educational communication  $-0.600$  to a threshold  $p < 0.01$ . The more internal a good student is, valuing dispositional factors, the higher the bilateral quality of communication will be. Being in a higher position than other colleagues, the teacher will pay more attention to him, which will lead to greater confidence in his abilities, courage in addressing the homework and lowering school failures. The more external the good student is, the more situational the communication will be, considering that its success is due to the situational factors. This is the case for a good student who was taken by surprise with a poor-prepared lesson, received a weak grade, but not as bad as another student who is considered poor at learning.

## **Conclusions**

The hypothesis that there are significant differences in the appreciation of the teacher's communication between pupils with good learning outcomes and poor pupils has been confirmed in the sense that good students perceive the teacher as bidirectional, paying attention and taking into account their opinions, and students with poor learning outcomes perceive the teacher (in a large percentage) as unidirectional. This may be due to the fact that in the didactic activity, the teacher, concerned with the curriculum, does not always have time or does not give time for the individualization of learning, the students with poor results considering themselves neglected, forgotten, putting the cause of their failure on the teacher. This is also explained by the results obtained in the Locus of Control questionnaire, which shows that a poor student attributes external causes, such as teacher, to school failure and similarly, a good student attributes internal causes to school success, reinforcing his self-esteem.

Good students tend to give internal causes to all school events because they are successful in this area, which is why they will be more appreciative of teacher competence. That is why they consider teachers as bilateral in their relationship with them. They perceive the way of teaching more as a guide, positively appreciating it and overlapping it to the style of educational communication. Because school failure is low, they benefit only from positive reinforcements, which leads to the appreciation of the leadership style as a communication. On the other hand, poor students at school, due to school failure, have developed an external way of assigning the cause, namely considering that someone else is responsible for their poor grades. This person will of course be the teacher, who in this group of subjects is considered unilateral and situational.

The educational communication greatly influences the educational process and pupils' performance in school tasks, which is demonstrated by the difference in perception between good and weak students. Their perception should be similar since the task concerns the evaluation of the same person, the teacher. The teacher can also contribute to deforming the perception of educational communication if he relies heavily on reprimand for weak students and on praise for good students.

Two-way communication should play the leading role, and it should not make any difference between students. It has been demonstrated by the Pygmalion effect that a negative perception of a student's ability will ultimately lead to a decrease in performance, and they will only try to meet that expectations. Also, the effect is true in the opposite direction, a weaker student being stimulated to learn when the teacher's expectations about his intellectual resources increase.

In the communication relationship between the transmitter and receiver there are a series of psychological, social and cultural-professional characteristics that differentiate them and which relate to the personality and education of each one, the different social status of the teacher and the pupil, their different representations, from the different field of experience to each other.

## **References**

- Abric, J.C., (2002), *Psihologia comunicării. Teorii și metode*, Ed. Polirom, Iași
- Anghel, P., (2003), *Stiluri și metode de comunicare*, Ed. Aramis, București
- Duck, S., (2000), *Relațiile interpersonale*, Ed. Polirom, Iași
- Dumitru, I. Al., (2000), *Dezvoltarea gândirii critice și învățarea eficientă*, Ed. De Vest, Timișoara
- Ezechil, L., (2002), *Comunicarea educațională în context școlar*, EDP, București
- Iucu, R., (2000), *Managementul și gestiunea clasei de elevi. Fundamente teoretico-metodologice*, Ed. Polirom, Iași
- Pânișoară, I.O., (2003), *Comunicarea eficientă. Metode de interacțiune educațională*, Ed. Polirom, Iași
- Peretti, de A., Legrand, J.A., Boniface, J.,(trad), (2000), *Tehnici de comunicare*, Ed. Polirom, Iași
- Rotter J.B. (1990). Internal Versus External Control of Reinforcement: A Case History of a Variable, *American Psychologist*, April 1990, 490-493
- Rotter, J. B. (1992). Some comments on the "cognates of personal control." *Applied & Preventive Psychology*, 1, 127-129

## MORAL JUDGMENTS OF NIGERIAN SECONDARY SCHOOL STUDENTS ON EXAMINATION MALPRACTICES: THE PRE-DURING-AND-POST EXAMINATION SCENARIOS

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**Abstract:** *The preponderance of cheating in examination/test has become so alarming that concerned stakeholders are perturbed on its impact on the moral ethos of the Nigerian society. Students' engagement in examination malpractices might stem from their moral judgment stance. This study determined the moral judgments of secondary school students on examination malpractices scenarios (pre-during-and-post) in Nigeria. The survey research design was adopted and four hundred secondary school students were sampled from two local government areas in Onitsha Education Zone in Anambra State. Results showed that on the average the percentages of students who agreed that it is not wrong to violate the listed pre-during-and-post examination ethics are 26.13%; 33.84% and 21.3% respectively. Also the violation of the during-examination ethic had higher mean score/percentage response in favor of those who think that it was not wrong to violate them than the violation of pre-and-post examination ethics. Multiple regression analysis showed that sex, class level, type of school and location of the school are (joint) significant predictors of students' moral judgment in only two scenarios. However, only school type made individual significant contribution in students' moral judgment of the three examination malpractice scenarios. Based on the findings recommendations were made.*

**Keywords:** *moral judgment; examination; malpractice; ethics; secondary;*

## **1-Introduction**

Educational endeavour is often embarked on with the aim of producing graduates of the best quality who will contribute meaningfully to the development of the society. It is through examinations that society can glean quality in an individual's thinking and gain confidence in his or her potentials. However, most nations have lamented the impact examination fraud has on the attainment of national goals. The attainment of the educational goals of the Nigerian state has also been hampered by fraudulent activities that go on during examinations both at public and internal examinations. The menace looks so insurmountable that it has been nicknamed by some concerned stakeholders. To some, it is "a hydra-headed monster" to others it is "a cankerworm that has eaten deep into the fabrics of academic development" (Ajogbeje, Olofinlae & Jeje, 2015). Within the students' parlance, it has been renamed and redefined in such a way that it is almost losing its characteristic illegality. Some refer to it as "Mgbo", "Igwebuike" "micro chip" "live wire" "brain support", and the centres where examination malpractices are perpetuated are now referred to as "miracle centres" or "special centres". The names given to it by perpetrators suggest harmlessness of this fraudulent practice which now question the moral ethos of the present Nigerian society. What used to be a very abnormal practice typical of those who were considered academically lazy has now become a normal phenomenon in which even school personnel are now syndicates to this unholy practice.

The percentages of students who were involved in officially reported cases of examination malpractices in 2005, 2006, 2007, 2008 and 2009 are 6.86%, 7.19%, 5.97%, 7.88% and 8.74% respectively (Ruqqayatu, cited in Anzene, 2014). Anzene referring to the report of the Weekend Times, 2007 presented the number of secondary schools derecognized from 2007 to 2010 by the Federal Government of Nigeria across the six geopolitical zones of Nigeria as a result of their involvement in examination malpractices. Fifty-four (54) secondary schools were derecognized in North Central, 8 in Northeast, 12 in North West, 48 in Southeast, 116 in South-South, 86 in South West.

The flouting of examination rules and regulation may begin before and even after the examination. Actually, adequate arrangement to perpetrate examination malpractice before the actual examination may consolidate this unwholesome act; and on the other hand, the post-examination malpractice may invalidate efforts made to control/avert examination malpractice during the examination. Post-examination malpractice has as its major constituents bribing the examiner for upgrade of marks, using sexual gratification to evade failure, mutilation of already submitted examination answer scripts and using the influence of higher authorities to convince examiners to

indiscriminately award marks to undeserving examinees. Pre-examination malpractice stems from the candidate preparing strips of paper with key points from his or her texts or lecture notes as reminders to answers in the examination hall, or bribing the lecturer before the examination is taken.

Government and concerned stakeholders have come up with strategies, laws, and edicts to exterminate the menace in Nigeria but it looks as if the problem is worsening every day. New trends in examination malpractices are defiling every measure adopted by examination bodies in Nigeria. The nation was hopeful with the introduction of computer based tests (CBTs) and CCTV cameras in examination centres by some public examination bodies in 2016. Sadly, the hope was dashed when the examination conducted using this method was greeted with large scale of examination malpractice cases leading to cancellation of results of candidates and derecognition of many centres this 2017. One wanders what could be done to stop this ugly situation. Many researchers have suggested instilling sound moral values in students to a point that they will have the right value system and stand up against violation of examination ethics. To do this, it warrants that studies be undertaken to ascertain the moral judgment of students on examination malpractices so that appropriate intervention programmes be mounted for them. This led to the present research in which the moral judgments of students on examination malpractices before, during and after examination were ascertained.

## ***2-Cheating in Schools and Moral Judgments***

West, Ravenscroft and Shrader (2004) have investigated academic dishonesty in a natural experiment and found that moral judgment of undergraduate students correlated insignificantly with their cheating behaviour and that action based on notions of justice which is referred to as Utilizer affected the relationship between cheating and moral judgment significantly. Further findings in their study revealed that moral judgment and honesty did not correlate while higher levels of cheating correlated with less honesty.

Grym and Liljander (2016) conducted a research indicating that by signalling a reminder of moral conduct, universities can create norms that reduce the chances of undergraduate students indulging in unethical behaviour in tests. They conducted an experiment in a Finnish business school, where 99 students were tested with a mathematical quiz. The participants were given the opportunity to cheat by self-reporting the scores. During the course of the experiment, half of them received a reminder of moral conduct which decreased the reported math scores, thus indicating less cheating. Findings showed that male students cheat more than females.

Based on the findings they recommended the use of primes to mitigate cheating.

Looking at plagiarism as another form of cheating in school, Jonsson & Orlenius (2013) investigated the correlations among moral standards and acceptance of plagiarism, cheating, collaboration and equity of treatment, and also, the impact of educational experience and discipline on these factors using 357 undergraduate students. A close to zero relationship was found between students' personal, conventional moral standards and their acceptance of plagiarism. They found that students' moral standards significantly correlated negatively with cheating and equity of treatment. The degree to which students find plagiarism unacceptable and also their acceptance of cheating and collaboration was influenced by educational discipline, teacher education versus informatics, norms and ethical value systems.

### ***3-Examination Malpractice through the lenses of Moral Judgment Theories***

Scholars have noted that the universality of what constitutes morality may be difficult to come by because what appears to be morally acceptable in a particular society may be greatly abhorred in another. However, there is a consensus that morality questions concern issues pointing to the rightness and wrongness of actions. Moral judgment strives to determine that which is right or that which wrong. Efforts have been made to untangle what determines moral judgments. There is the rationalist model of moral judgment pioneered by Piaget (1932) and Kohlberg (1969) which proposes that moral judgments are products of the controlled, effortful, slow process of reasoning (Liao, 2010). For the rationalists, moral judgment is influenced by the ability to reason and matures along the lines of reasoning advancement. For them, the *primus inter pares* in moral judgment is ability to reason. Also, the social intuitionist model of moral judgments pioneered by Jonathan Haidt in which determinant forces of moral judgment may not necessarily rest on reasoning but on human intuitive system have surfaced in recent time in social psychology (Liao, 2010). The third school of thought in moral judgment theory is the emotionalists who brought to the fore the importance of human emotions on judgment considering the enormous emotions exhibited when making moral judgment and also the apparent inability to defend moral judgment rationally when confronted with question to explain such moral stance (Monin, Pizarro & Beer, nd).

Seeing examination malpractice (a moral weakness and infraction) through the lenses of moral judgment theories demands an integrationist approach taken into account the interplay of forces that could lead to this. There is the place of the level of reasoning, emotion and intuition of the

individual concerned. As children grow and develop cognitively there could be apparent variance in the way and manner at which they reason the implication of moral infractions. The issue of morality could be differently subjected to sophisticated reasoning in which there is a weighing of the advantages and disadvantages of a particular situation. Differentially, certain people are likely to concede to fear of punishment or rejection referred to as the pre-conventional stages, some others may be those who see the rules of society as such that must be religiously followed, observed and deserving respect which has been labelled the conventional stages, and not many are likely to go against the norm considering what they see as universal principles which has been termed post-conventional stages (Monin, et al, nd). However, this stance could be 'consumed' by emotions attached to a particular thing; for example, the significance attached to certificate acquisition in Nigeria as against mastery could arouse a heightened emotion that could becloud the moral reasoning of an individual. Moreover, the pressure and the stress to succeed in an examination that has been seen as survival of the fittest could lead individuals to indulge in fraudulent practices in test/examination conditions and more especially those who have not attained the post-conventional moral stage. This pressure may come from friends, parents, other significant persons and even the structure of the society (Kaufman, 2008).

### **3-Method**

In this study the survey research design was adopted since the opinions of respondents were sought by the researchers from a relatively large sample considered representative of the population. This is informed by the fact that students' opinions on the phenomenon under investigation could be generalizable to population, and are also measurable. The fact that the moral stance of students affects their judgment of examination malpractice would be better understood from the realist ontological perspective.

### ***4-Sample and Sampling Technique***

The respondents comprised 400 senior and junior secondary school students in two local government areas in Onitsha Education Zone of Anambra State, Nigeria. These students were selected from JSS 3 and SSS 3 classes given the fact that they were getting ready for public examinations in the 2016/2017 academic session. The researchers distributed the 400 copies of the questionnaire to students.

A multi-stage sampling technique was adopted in selecting the students in the study. First the researchers utilized a purposive sampling technique in selecting two local government areas in Onitsha Education Zone. One local government was purely an urban area while the other was a rural area. Then



simple random sampling technique was used in sampling 4 private secondary schools and six public secondary schools from the rural and urban settings of the two local government areas in the Education Zone. Two private schools were from the rural area; the other two private schools were from the urban area; 3 public schools were from the rural area while the other three public secondary schools were from the urban area of the Education Zone. Then senior and junior secondary school students who gave their consent to the study after being sensitized by their teachers who served as research assistants were used.

### ***5-Data Collection Techniques***

#### ***6. Instrument***

A 25-item questionnaire structured in the four-point scale of strong agree (SA), agree (A), disagree (D) and strongly disagree (SD) was used in collecting the data used in the study. The instrument was developed after an extensive literature review was conducted. Also the work of Bisong, Akpama, and Edet (2009) was consulted during the questionnaire construction. It was later subjected to content validity. The instrument has two sections; section A contains students' demographic information while section B has three clusters. The reliability test of the instrument was conducted using Cronbach Alpha in which the coefficients for the three clusters (Pre-Examination Malpractices Scenario, During-Examination Malpractices Scenario, and Post-Examination Malpractices Scenario) are 0.67, 0.75 and 0.78 respectively. The pre-examination malpractice scenario cluster dealt with instances of the moral views of students on unacceptable means of passing examinations that are perpetrated before the actual examination; the second cluster centred on instances of infractions that are practised during the examination proper while the third cluster dealt with such amoral means of passing examinations that occur after the examination had just been taken.

#### ***7. Data Collection Procedure***

The consent of the school authorities was sought and a brief was held with the research assistants who are ten (10) regular teachers in the schools sampled. These teachers were contacted by the third co-author and had discussions on the essence of the study. The consent of the students was sought and their teachers explained to them about the study. The teachers were told to monitor the filling in of the questionnaire and collect the copies.

### 8. Data Analysis

The research questions were answered with percentage and mean statistic while the hypotheses were tested at 0.05 level of significance using multiple regression.

### 9. Results

**Table 1: Distribution of respondents by socio-demographic characteristics**

	Variables	Frequency	Percent(%)
Sex	Male	130	32.5
	Female	270	67.5
Class level	Junior	212	52.9
	Senior	187	46.9
School type	Private	157	39.3
	Public	243	60.8
school location	Rural	178	44.5
	Urban	222	55.6

Table 1 shows that 32.5% Of the respondents are males while 67.5% are female, 52.9% are junior students and 46.9% are senior students, 39.3% of the students are in private schools while 60.8% are in public schools, 44.5% of students are from rural areas while 55.6% are from urban areas.

**Table 2: Percentage/Mean Responses of Students' Moral Judgments on Pre-Examination Malpractices Scenarios**

S/ N	Before writing my examinations.....	A( %)	D(%)	Mea n	Remar k
1	I don't think it is wrong to see the question paper before the examination	31.1	68.5	2.05	Disagr ee
2	If I have the opportunity to bribe a teacher to tell me the answers to questions to examination I will do that	15.8	83.8	1.70	Disagr ee
3	I don't think it is wrong to prepare some material prior to entering the exam hall	27.6	69.3	2.09	Disagr ee
4	It is not wrong to hire a mercenary to write exams for people.	20.1	78.8	1.85	Disagr ee

5	I don't think it is wrong for somebody to contribute money as "kola nut" for the invigilator	38.0	60.4	2.23	Disagree
6	It is not wrong writing some formula in my hand/laps before entering the hall, as reminder.	23.3	75.8	1.86	Disagree
7	It is not wrong to pay for a special centre where I will write my exam and be assured of good grades.	31.3	67.7	2.16	Disagree
8	It is not wrong to pay for the invigilator not to come to my school during examination.	21.8	77.3	1.90	Disagree

*Keys: A=Strongly Agree +Agree, D= Strongly Disagree +Disagree*

Results in table 2 shows that on the average 26.13% of the participants agreed it is not wrong to violate the listed pre-examination ethics while 72.46% of the participants disagreed with statements. Items 2, 4, 6, 8 had the highest percentages of disagreement while over 30% of respondents agreed to items 1, 5, and 7.

**Table 3: Percentage/Mean Responses of Students' Moral Judgments on During-Examination Malpractices Scenarios**

S/N	When I am writing my exams I don't think-----	A(% )	D(% )	Mean	Decision
1	It is wrong to ask my mate questions I couldn't remember during-exam	70.8	28.8	3.04	Agree
2	It is wrong to peep from my mate's work during examination	30.8	68.3	2.10	Disagree
3	It is wrong to exchange ideas in examination hall with my colleagues	49.3	48.8	2.53	Agree
4	It is not wrong to ask teachers for an answer in examination hall	26.5	71.3	2.05	Disagree
5	It is not wrong for one to copy answers written on the board by teachers	33.3	61.9	2.19	Disagree
6	It is not wrong to allow somebody to write for you in exam hall	19.6	80.3	1.80	Disagree
7	It is not wrong to pay for a separate hall where one can be helped in exam	20.6	79.0	1.76	Disagree

					ee
8	It is not wrong for one to cheat in exam hall when an exam is difficult	33.6	66.0	2.12	Disagree
9	It is not wrong to cheat in exam malpractice when one is supported by parents and school authorities	35.0	63.3	2.22	Disagree
10	It is not wrong to indulge in exam malpractice when one is supported by parents and school authorities	31.0	66.8	2.09	Disagree
11	It is not wrong to send extra paper to mercenaries who will help you in exam.	21.3	72.3	1.82	Disagree

*Keys: A=Strongly Agree +Agree, D= Strongly Disagree +Disagree*

Results in table 3 shows that on the average, 33.84 of the participants agreed it is not wrong to violate the listed during-examination ethics while 64.24% of the participants disagreed with statements. Items 4, 6, 7 and 11 had the highest percentages of disagreement while over 30% of respondents agreed to items 1, 2, 3, 5, 8, 9 and 10.

**Table 4: Percentage/Mean Responses of Students' Moral Judgments on Post-Examination Malpractices Scenarios**

S/N	After writing exams, I don't think.....	A(%)	D(%)	Mean	Decision
1	It is not wrong for one to give the invigilator money even after the time of the exam has elapsed.	26.0	72.1	1.95	Disagree
2	It is not wrong for one to go to the teachers to plead for scores when one did not write well	22.5	76.2	1.87	Disagree
3	It is not wrong to put money in one's script to bribe the examiner	16.8	81.3	1.68	Disagree
4	It is not wrong if my school should bribe the assessor that will mark our script	26.0	71.1	1.97	Disagree
5	It is not wrong to pay for special marking during marking of examination scripts	22.8	76.4	1.91	Disagree
6	It is not wrong to pay for another person's results to be given to me	13.8	82.5	1.55	Disagree

Keys: A=Strongly Agree +Agree, D= Strongly Disagree +Disagree

Results in table 4 shows that on the average, 21.3% of the participants agreed it is not wrong to violate the listed post-examination ethics while 76.6% of the participants disagreed with statements. All the Items had very high percentages of disagreement while about 26% of respondents agreed to items 1 and 4 which recorded the highest percentage of agreement.

**Table 5: Regression for predictors of Moral Judgments Before- Examination Malpractices Scenarios**

Source	B	Std. Error	Beta	T	p-value
(Constant)	2.654	.079		10.458	.000
SEX	-.028	.053	-.018	-.360	.719
LEVEL	-.023	.077	-.021	-.428	.669
SCHOOL TYPE	-.276	.073	-.185	-3.572	.000
LOCATION	-.091	.079	-.064	-1.244	.214
R	.186				
R <sup>2</sup>	.035				
F	2.932				.007

As shown in table 5, the multiple regression coefficients (R) was .186 while R<sup>2</sup> was .035 This is an indication that sex, class level, type of school, and location of the school contributed to 3.5% in explaining students' judgment of pre-examination malpractices. However, the corresponding F (4, 398) = 2.932, is statistically significant as shown by the p-value (.007) which was less than the stipulated significance level (0.05). It was therefore decided that sex, class level, type of school and location of the school are statistically significant. However, only school type made significant contribution to students' judgment of pre-examination malpractices by contributing 27.6%.

**Table 6: Regression for predictors of Moral Judgments During- Examination Malpractices Scenarios**

Model	B	Std. Error	Beta	T	p-value
(Constant)	2.131	.254		8.406	.000
SEX	.140	.079	.089	1.778	.076
LEVEL	-.016	.053	-.016	-.310	.757
SCHOOL TYPE	-.225	.077	-.150	-2.912	.004
LOCATION	.119	.073	.083	1.631	.104
R	.213				

R <sup>2</sup>	.045	
F	4.659	.001

As shown in table 6, the multiple regression coefficients (R) was .213 while R<sup>2</sup> was .045. This is an indication that sex, class level, school type and school location contributed 4.5% in explaining students' judgment of during-examination malpractices scenarios. However, the corresponding F(4, 397) = 4.659, is statistically significant as shown by the p-value (.001) which was less than the stipulated significance level (0.05). It was therefore decided that sex, class level, school type and school location are statistically significant during examination. However, only type of school made significant contribution to students' judgments of during-examination malpractices scenarios.

**Table 7: Regression for predictors of Moral Judgments After-Examination Malpractices Scenarios**

Source	B	Std. Error	Beta	T	p-value
(Constant)	2.345	.270		8.682	.000
SEX	-.044	.084	-.027	-.528	.598
LEVEL	-.043	.056	-.038	-.753	.452
SCHOOL TYPE	-.222	.082	-.141	-2.692	.007
LOCATION	-.016	.078	-.011	-.209	.834
R	.148				
R <sup>2</sup>	.022				
F	2.215				.067

The result in table 7 shows that the multiple regression coefficients (R) were .148 while R<sup>2</sup> was .022. This is an indication that students' sex, class level, school type and school location contributed 2.2% to explain the variances in response. However, the corresponding F (4, 397) = 2.215, is not statistically significant as shown by the p-value (.067) which was greater than the stipulated significance level (0.05). It was therefore decided that sex, class level, school type and school location are not statistically significant. Only school type made significant contribution to students' judgment of after-examination malpractices scenarios.

## 10. Discussion

The essence of this is to empirically ascertain how students could judge the violation/infractions on examination ethics since moral judgments of students could in a way direct their actions. Taking the pre-examination malpractices scenarios into account, results showed that on the average 26.13% of the participants agreed it is not wrong to violate the listed pre-examination ethics while 72.46% of the participants disagreed with statements. For the majority, the actions were adjudged wrong while 26.13% of the students could not see anything wrong in violating such ethics. This percentage should not be over-looked considering the enormity of effects engagement on examination malpractice could have on national development. What is disturbing in the results is that percentage increase occurred in judging 'seeing the question papers before examination, bribing the invigilator before examination and registering in special centres' as being acceptable. These are actually very serious offenses in public examinations and could point to the fact that when students consider actions as benefiting them they could go for it even when they are infringements on the ethics of the examinations. This agrees with some findings that moral reasoning or judgment may not actually have direct impact on the actual behaviour (West, Ravenscroft & Shrader, 2004). Generally, students judged most of these unethical pre-examination cases as morally unacceptable.

The multiple regression using sex, class level, type of school, and location of the school as predictors contributed to 3.5% in explaining students' judgment of pre-examination malpractices. The predictor variables - sex, class level, type of school and location of the school - could jointly predict students' moral judgment of pre-examination malpractices scenarios. However, only school type was able to make individual significant contribution to students' judgment of pre-examination malpractices. Gender not making significant contribution might have resulted from the fact that it has been found by West et al; Okafor, Okaro and Egbunike (2015) that cheating and as well as honesty was equivalent across male and female students.

Also, findings on students' moral judgments on during-examination malpractices scenarios showed that on the average, 33.84% of the participants agreed it is not wrong to violate the listed examination ethics as they taking their examination while 64.24% of the participants disagreed with statements. Items 4, 6, 7 and 11 had the highest percentages of disagreement while over 30% of respondents agreed to items 1, 2, 3, 5, 8, 9 and 10. Looking at individual items in the table, items that have to do with violation of examination ethics as it gets to do with peer collaborative copying and exchanging of answers in examination hall had the highest nod from the students. What this implies is that they are likely not to see anything

wrong with violating such ethics during examinations. West et al has noted that why students engage in similar acts even when they are proscribed is that they often rationalize it and argue that they are used to working in groups and helping one another out. Other items that got higher nods from students are items that had to do with when they are supported by parents and school authorities to engage in examination malpractices; and also when the examination is considered difficult. This is likely to reveal the level of moral reasoning of these students. They are likely to operate below Kohlberg's post-conventional level of reasoning and as such since the moral is just like social contract; the violation of it by significant persons and those in authority is likely to make it inconsequential. This agrees with the findings of Milem (2007) that faculty and peer behaviours are more likely to influence students' decisions regarding academic integrity than any other factor.

The multiple regression using sex, class level, school type and school location contributed 4.5% in explaining students' judgment of during-examination malpractices scenarios. The predictor variables - sex, class level, school type and location - jointly significantly predicted the students' moral judgments on during-examination malpractices scenarios. Only type of school could individually make significant contribution to students' judgments of during-examination malpractices scenarios. This could have arisen because moral development occurs in a context and different institutions are likely to have different ways of stimulating moral development and those with superior strategy could influence moral judgment of their students more especially when it demands that difficult decisions must be made like during examinations when one may not have an alternative but to pass the exams (King & Mayhew, 2002).

Findings on students' moral judgments on after-examination malpractices scenarios showed that on the average 21.3% of the participants agreed it is not wrong to violate the listed examination ethics as they taking their examination while 76.6% of the participants disagreed with statements. All the Items had very high percentages of disagreement while about 26% of respondents agreed to items 1 and 4 which recorded the highest percentage of agreement. The items that had the highest percentage of agreement were items that they considered could directly help them make higher marks. Such items were items like bribing the invigilators and assessors even after the examinations. The multiple regression using students' sex, class level, school type and school location contributed 2.2% to explain the variances in response. The predictor variables - sex, class level, school type and school location were not statistically significant in predicting students' moral judgment on post-examination malpractice scenarios. Only school type made individual significant contribution in predicting students' judgment of post-



examination malpractices scenarios and this is also in agreement with the views of (King, et al).

Interestingly, however, the violation of the during-examination ethic had higher mean score/percentage response in favour of those who thinks that it wasn't wrong to violate them than the violation of pre-and-post examination ethics. This points to the fact that moral reasoning of the students could dwindle in the face of tension. They could easily compromise their stance when they see that they have no other alternative.

## **11. Conclusion**

The study found that a good number of students see nothing wrong in violating some of the examination ethics especially in the during-examination scenario which indicates that students' moral judgment could be compromised in the face of difficulty. This is an eye-opener for stakeholders who are coming up with strategies to tackle the problem that the issue of examination malpractice involves the moral/value system of the person involved and efforts must be made to uproot wrong value systems in our society through early intervention. Therefore, there is need to explicitly and conscientiously teach examination ethics and as well boost the moral ego of the students. Students who are outstanding in their conducts during examinations should be singled out and rewarded. There is also the need to de-emphasize certification and emphasize mastery of skills in our schools so that the tension associated with certificate acquisition considered the only ticket to having food on the table will be minimized. Instructional strategies and psycho-educational interventions for learners should be such that could help build their self-confidence in their abilities, make them self-regulated and intrinsically motivated learners who could comfortably venture into new and difficult areas. They should be allowed to appreciate their 'academic weaknesses' and see them as platforms for academic progress.

## **References**

- Ajogbeje, O. J., Olofinlae O. & Jeje O. S. (2015). Perceptions of polytechnic students towards examination malpractice. *Research & Reviews: Journal of Educational Studies*, 1(1), 20-29.
- Anzene, S. J. (2014). Trends in examination malpractice in Nigerian educational system and its effects on the socio-economic and political development of Nigeria. *Asian Journal of Humanities and Social Sciences (AJHSS)*, 2(3), 1-8.
- Bisong, N. N., Akpama, F. & Edet, P. B. (2009). Cheating Tendency in Examinations among Secondary School Students in Nigeria: a case study of schools in the Odukpani Local Government Area, Cross River State. *Policy Futures in Education*, 7(4), 410-415. [www.worlds.co.uk/PFIE](http://www.worlds.co.uk/PFIE)

- Grym, J. & Liljander, V. (2016). To cheat or not to cheat? The effect of a moral reminder on cheating. *NJB*, 65(3-4), 18-37.
- Kaufman, H. E. (2008). Moral and ethical issues related to academic dishonesty on college campuses. *Journal of College and Character*, 9 (5), 1-8. DOI: 10.2202/1940-1639.1187
- King, P. M. & Mayhew, M. J. (2002). Moral judgment development in higher education: Insights from the Defining Issues Tests. *Journal of Moral Development*, 31(3), 247-270.
- Liao, S. M. (2010). Bias and Reasoning: Haidt's theory of moral judgment. [www.smatthewliao.com/wp-content/uploads/2010/10/liao\\_bias\\_and\\_reasoning.pdf](http://www.smatthewliao.com/wp-content/uploads/2010/10/liao_bias_and_reasoning.pdf)
- Milem, J. F. (2007). Exploring the relationship between moral reasoning and students' understanding of the honour code at the University of Maryland. Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Education Leadership and Policy.
- Monin, B., Pizarro, D. A. & Beer, J. S. (nd). Reason and Emotion in Moral Judgment: Different Prototypes Lead to Different Theories. In K.D. Vohs, R. F. Baumeister, & G. Loewenstein (in press). *Do emotions help or hurt decision making?: A hedgefoxian perspective*. New York: Russell Sage Foundation
- Okafor, G O., Okaro, S. C. & Egbunike C. F. (2015). Students perception of ethics: Implications for national development. *International Journal of Academic Research in Business and Social Sciences*, 5 (1), 345-357.
- West, T., Ravenscroft, S. & Shrader, C. B. (2004). Cheating and moral judgment in the college classroom: A natural experiment. *Journal of Business Ethics*, 54, 173-183. Doi:10.1007/s10551-004-9463-x. [http://lib.dr.iastate.edu/management\\_pubs/12](http://lib.dr.iastate.edu/management_pubs/12)

## SELF-VALUING, ATTITUDE TOWARD SELF AND TOWARD LIFE OF PEOPLE WITH MOTOR DISABILITIES

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**Abstract:** *The actual research has pursued the investigation of the attitude toward the self and the attitude toward life of the women and men with motor disabilities and also analysed the self-valuing of people with motor disabilities depending on the nature of the disability (innate or acquired) and the level of education (N - 93 subjects). Women more than men, feel that the presence of disability is affecting their attitude toward the self and toward life. Comparing the results for self-valuing, depending on the nature of the disability - innate or acquired, we found a breakdown of the results in favor of innate disabilities. People with innate motor disability are self-valuing better than those who have acquired disability during the life.*

**Key words:** *motor disability; attitude toward the self; attitude toward life; self-valuing; gender perspective; nature of the disability (innate or acquired);*

### 1. Introduction

The ability to walk is one of the attributes of human independence and autonomy. So we talk about: walking with a continuous step, walking with symmetry step, deviation (of path and turning). Coarse and fine motor skills are an essential component of many daily activities such as clothing-stripping, feeding or playing/working. Poor fine motor skills may lead to difficulties in doing academic activities, increasing anxiety and low self-esteem (Gaul, Issartel, 2016), a negative self-image (David, 2015), depression (Dauvergne, et. al., 2007). Adolescents with low motor skills have diminished their perception of physical self and consequently tend to avoid physical activities (McIntyre et al., 2015). The etiology of motor disabilities calls for perinatal etiologies: hypoxia at birth (6.3%); postnatal etiology: neonatal infections such as meningitis and hyperthermia of unknown origin (9.7%), seizures (4.2%) and jaundice (2.8%); prenatal (2.8%), multiple pregnancies (2.1%) (Batoui, Habbari, Hassnaoui, Ezoubair, 2015), prenatal etiologies dominated by low birth weight (16.7%).

## 2. Background

As members of society, it is normal to take into account the need for services and support for people with disabilities to improve their lives as well as to initiate strategies to prevent their health deterioration (McDermott, Turk, 2011). Health policies in support of people with disabilities support the importance of maintaining basic functional status and promoting health. The relationship between the promotion of health through physical activity and the prevention/ reduction of secondary conditions among people with various physical disabilities was analyzed. In this case, there was an increase in community's participation in activities for people with physical disabilities (White, Gonda, Peterson, Drum, 2011). Parental support in physical activities of children is important, especially for young children with disabilities, given the low rates of physical activity and dependence on their parents. Parents have encouraged their children to participate in sports and physical activities. Although they have not seen their children as particularly skilled, they have understood and enjoyed physical activity and sports. Parents also understood and encouraged the mutual relationships established by their children in their physical activities with their parents (Martin, Choi, 2009). Family support was driven by how its members perceive the damage they incurred. Driven by the need to protect the person with disabilities, family members try to control the emotional effects of injuries, creating a sort of "buffer" (Ogilvie, Foster, McCloughen, Curtis, 2015). Research has highlighted the importance of effective communication, the development of physiotherapist-family relationships, cooperation-based relationships, and the adoption of a family centered approach (Greenstein, Lowell, Thomas, 2016). Music has been successful as a therapeutic intervention for people with mental and physical disabilities. Motricity and coordination can be enhanced by many musical experiences (Hatampour, Zadehmohammadi, Masoumizadeh, Sedighi, 2011). School, through teachers, supports the process of identifying people with disabilities, a process that starts with a sense of failure and early exclusion in life, continues through a turning point, and should end with the sense of control of one's own life (Dvir, 2015). There is a link between chronology, disability and social inequality, which is why a new way of collaborating between social factors related to health and disability is needed. Adolescents with physical disabilities participate in fewer social activities and have fewer relationships with friends. There are a number of critical areas for adolescents with physical disabilities towards which health promotion efforts should be directed: integration into congregational groups, increasing educational aspirations (Stevens et al., 1996). Achieving an online support pilot operation has provided more interaction with colleagues for them. The organization of these groups has reduced the feeling of loneliness and has increased the social acceptance and

confidence of people with disabilities (Stewart, 2011). Some people with motor impairment may hide their disability to avoid discrimination or stigma. For some, physical limitations can not stop them from realizing dreams, for others, this may be a struggle that affects various aspects of their lives (Nkabinde, Obiakor, Offor, Smith, 2010) and can cause mental stress (Trani, Ballard, Peña, 2016). Looking at the integration of people with physical disabilities into society, we have recently noticed that they are not only more and more integrated into society, but have even made significant achievements in sport: it is now commonplace for athletes with quadriplegia to finish the marathon. Practicing a sport is a reality for people with motor disabilities, even in a wheelchair. Wheelchair tennis has great potential for social integration of people with disabilities (Stănescu, 2014). But, all are personal, individual equations. Here's the life story of Ben, which illustrates the benefits and costs of trying to compensate for disability through sport. By allocating substantial time to sport and physical activity, Ben would seem to avoid or circumvent some of the psychosocial challenges of maturity (eg, the formation of new friendships and romantic relationships). In Ben's life, sport and physical activity posed problems in his psychosocial development (Gaskin, Andersen, Morris, 2010). When it comes to the social utility of people with disabilities, designing and designing digital games, two obstacles have been described: first, involvement of the public with special needs can introduce new practical and ethical challenges, and secondly, the use of non-design experts was criticized because the participants did not have the necessary skills to create the appropriate quality games. In addition, the results show that the design exercise involves emotional vulnerabilities that need to be considered when working with the target audience, such as expert designers (Alonso-Valerdi, Salido-Ruiz, Ramirez-Mendoza, 2015). However, the involvement of people with disabilities in designing, in technology has shown results that demonstrates that the design exercise is vulnerable to both groups (and those with motor disabilities - wheelchairs and those without motor disabilities). The risk of practical and emotional vulnerability must be taken into account when working with expert designers (Gerling, 2016). Persons with chronic physical disabilities are less satisfied with their lives than people with no health problems (van Campen, Cardol, 2009). Life satisfaction is conditioned by: civil status, general health and social well-being (Tate, Riley, Perna, Roller, 1997). Among the different types of disability, loss of motor skills is particularly serious for the consequences and sufferings produced, both physical and mental. This leads to particularly difficult and lengthy disability issues. For these people, robotics assisted for motor deficiencies can be an important alternative as it offers new possibilities for action on the environment. To adapt this problem, the technology comes in: human-computer technology (Khomiakoff,

Czternatsy, Vandromme, 2009, Galante, Menezes, 2012; Li-Tsang, 2011) et al., 2015), 3D computer games controllers (Martins, Cunha, Morgado, 2012), keyboard and mouse, and the provision of alternative input techniques using switches (Shein, 1992). The use of robotic technology with assistive devices opens new opportunities for people with severe disabilities (tetraplegia, spinal cord injuries, and so on) both at work and in their homes. It can reduce social exclusion and support social and professional integration (Bühler, Hoelper, Hoyer, Humann, 1995). There was a lack of involvement in leisure activities, especially for people with severe disabilities. In spite of the desire to explore, the possibilities for traveling, in hiking, the possibility of access to different areas is limited to people with disabilities. The physical difficulties and high costs of accessing these areas are real obstacles to the great desire to visit the above mentioned areas (Lovelock, 2010). When there were people offering leisure time in in-door space, there was an increased commitment from people with disabilities to these activities (Wilson, Reid, Green, 2006). Participating in recreational activities is a fundamental human right and an important factor in the quality of life. It has environmental barriers (environmental factors) for children and young people with physical disabilities. Barriers have been encountered predominantly in school environments and in work environments. Significant differences were found between the rural area and the urban community (Law, Petrenchik, King, Hurley, 2007). Frequency of participation in recreational activities for children and young people with physical disabilities is associated with a variety of variables: motor capacity, cognitive ability, communication skills, age, gender (Bult et al., 2011). Children with disabilities, and especially girls, have a more limited participation in recreational activities involving social interactions (Schreuer, Sachs, Rosenblum, 2014). Adults with physical disabilities often have limited opportunities to participate in leisure activities. Virtual reality technologies can serve to expand the repertoire of recreational activities, activities accessible to people with disabilities, activities that have been perceived as pleasant and successful. They maintained a high level of interest and offered varied and motivating opportunities for time activities (Yalon-Chamovitz, Weiss (Tamar), 2008).

### **3. Methodology**

#### **3.1. Research objectives**

The research objectives focused on: (1) analyzing attitudes towards oneself and towards the lives of people with motor disabilities; (2) analyzing the self-valuing of people with motor disabilities after the nature of disability

## **Research hypothesis**

The main research hypothesis was:

- (1) we anticipate that self-attitude and attitude towards life are lower in women with motor disabilities than in men with motor disabilities;
- (2) we anticipate that the self-valuing of motor deficiencies depends on the nature of the deficiency (innate or acquired) and by the level of education (gymnasium, lyceum, university) of the person with motor deficiencies (people with inborn impairment, respectively, those with higher education are better value-added).

### **3.2. Research method**

The survey was based on the questionnaire; this is the main method used in the research. The questionnaire was built on two dimensions: leisure and attitude towards the world and life. The questionnaire was developed and validated specifically for this research (Alpha Chronbach Coefficient: 0.802.)

### **3.3. Research group**

The research group comprised 93 subjects with motor disabilities (para, tetra, hemi (pleats), para, tetra, hemi, myopaths, amputated limbs). Of whom 60.2% (56 subjects) were male, the remaining 39.8% (37 subjects) being female. Depending on origin, 73 subjects (78.5%) from the environment urban, with the remaining 20 subjects (21.5%) coming from rural areas. If we look at the age group, we have 14 subjects (15.05%) aged up to 20 years; 29 subjects (31.18%) aged 21-30 years; 17 subjects (18.27%) aged 31-40; 18 subjects (19.35%) aged 41-50 years and 15 subjects (16.12%) aged over 50 years. Another criterion for differentiation was the level of education of subjects: 16 subjects (17.2%) who graduated gymnasium, 41 subjects (44.1%) who graduated high school, 22 subjects (23.7%) who graduated post-secondary school and 14 subjects (15.1%) who graduated higher education (faculty). Engagement was another aspect of the batch characterization, so only 26 subjects (28%) work (have a job), the remaining 67 subjects (72%) unemployed. If we look at the subjects from the point of view of the nature of the deficiency, we have 32 subjects (34.4%) with inborn deficiency and 61 subjects (65.6%) who have acquired the deficiency during their lifetime.

## **4. Results**

In the first hypothesis of research: we anticipate that attitude toward self and attitude toward life are lower in women with motor disabilities than in men with motor disabilities. Self-attitude and life attitudes were investigated through seven items of the questionnaire for which a median

Alpha Chronbach Coefficient was calculated (0.579): „Am I going to get angry when I fail to do what I propose.”, „Others are to blame for what's happening to me.”, „I was surprised to have feelings of jealousy towards people who do not experience the same deficiency.”, „I'm going to cry without reason.”, „I'm a person happy with my life.”, „I'm happy.”, „I think I'm a happy person with my life at the moment.” Women are those who develop jealousy toward those who do not face the same difficulty (see Table 1): 15 subjects - 16.13% (2.15% rarely and 13.98% very rare) with an average of 2.51 at a standard deviation of .211 compared to men who are jealous of other people rarely and very rarely 32 subjects - 34.41% (12.90% rarely and 21.51% very rare) with an average of 2,51 to a standard deviation of .211. Women are more likely to cry more than men: 8 subjects - 8,60% (8,60% of them) with an average of 2,73 at a standard deviation of .990 compared to men who often complain often and very often: 6 subjects - 5.45% (4.30% often,% very often) with an average of 1.98 at a standard deviation of 1.087. The proportion in which men complain very rarely and rarely is very high, namely 24.73 very rarely and 20.43% rarely. Women are more dissatisfied with their lives than men. Women claim to be satisfied with their lives, 7 subjects - 7.53% (5.38% often, 2.15% very often) with an average of 2.70 at a standard deviation of 1,127 compared to men who are satisfied of their lives often and very often, 18 subjects - 19.36% (13.98% often and 5.38% very often) with an average of 3.13 at a standard deviation of 1.127. Women are unhappier with their lives than men. Women claim to be happy, only 7 subjects - 7.53% (5.38% often and 2.15% very often) with an average of 2.76 at a standard deviation of 1,065 compared to men who are often happy very often: 24 subjects - 25.81% (25.81% often and 0% very often) with an average of 3.21 at a standard deviation of .825. All women feel more unfulfilled than men. Of these, only 7 subjects - 7.53% (3.23% often, or 4.30% very often) with an average of 2.86 at a standard deviation of 1,084 vs. men, of which often and very often 19 subjects - 20.43% (18.28% often, 2.15% very often) with an average of 3.08 at a standard deviation of .900.

*Tabel no. 1. Values of attitude towards self and towards life of people with physical disabilities*

<i>Frequency</i>	very rarely	quite rarely	sometimes	often	very often	mean	standard deviation
<i>Gender</i>							



<i>Am I going to get angry when I fail to do what I propose.</i>								
	Men	2.15%	4.30%	24.73%	26.88%	2.15%	3.38	.882
	Women	6.45%	2.15%	16.13%	12.90%	2.15%	3.05	1.129
<i>Others are to blame for what's happening to me.</i>								
	Men	21.51%	12.90%	12.90%	2.15%	6.45%	2.14	.177
	Women	13.98%	2.15%	15.05%	2.15%	0%	1.78	.160
<i>I was surprised to have feelings of jealousy towards people who do not experience the same deficiency.</i>								
	Men	21.51%	12.90%	12.90%	10.75%	2.15%	2.32	.165
	Women	13.98%	2.15%	6.60%	6.45%	2.15%	2.51	.211
<i>I'm going to cry without reason.</i>								
	Men	24.73%	20.43%	6.60%	4.30%	2.15%	1.98	1.087
	women	6.45%	6.45%	18.28%	8.60%	0%	2.73	.990
<i>I'm a person happy with my life.</i>								
	Men	2.15%	12.90%	25.81%	13.98%	5.38%	3.13	.974
	women	8.60%	4.30%	19.35%	5.38%	2.15%	2.70	1.127
<i>I'm happy.</i>								
	Men	2.15%	8.60%	23.66%	25.81%	0%	3.21	.825
	women	6.45%	6.45%	19.35%	5.38%	2.15%	2.76	1.065
<i>I think I'm a happy person with my life at the moment.</i>								
	Men	2.15%	12.90%	24.73%	18.28%	2.15%	3.08	.900
	women	4.30%	8.60%	19.35%	3.23%	4.30%	2.86	1.084

The items that men record higher values are: Do I get angry when I fail to do what I propose and Others are to blame for what happens to me. For the item Do I get angry when I can not do what I propose, men show good results: 27 subjects - 29.03% (26.88% often, 2.15% very often) with an average of 3.38 at a standard deviation of .882 compared to women who are

often annoyed and very often only 14 subjects - 14.05% (12.90% often and 2.15% very often) with an average of 3.05 at a standard deviation of 1.129. Men consider that are to blame for what happens to them in a higher proportion than women: 8 subjects - 8.60% (2.15% often and 6.45% very often) with an average of 2, 14 at a standard deviation of .177 compared to women who consider to be often responsible and very often only 2 subjects - 2.15% often with an average of 1.78 at a standard deviation of .160. We have found the following positive Spearman Correlations with average values: I was surprised to feel jealous of people who do not face the same deficiency / I happen to complain without reason - ( $\rho=.546$ ,  $p<0.01$ ); I am a person happy with my life / I am happy ( $\rho=.653$ ,  $p<0.01$ ); I am happy / I think I am a person thanks to my life at the moment - ( $\rho=.662$ ,  $p<0.01$ ); respectively, positive correlation, high value: I am a person thanks to my life / I think I am a satisfied person of my life at the moment - .721 ( $p<0.01$ ). The results of the one-way ANOVA test confirm the above:  $F = 11,300$ ,  $p <.001$  between crying without reason and gender respectively  $F = 5.425$ ,  $p <.022$  between being happy and gender and also  $F = 3,695$ ,  $p <.058$  between being satisfied with life and gender. Calculation of the Chi Square test brings significant differences by gender and Mi happens to cry without reason for a  $\chi^2 (4) = 20,263$ ,  $p = 0,000$  with a moderate effect for a Phi  $\phi = 0,467$ . Significant values for the Chi Square test have been recorded: by gender and I am a person satisfied with my life for a  $\chi^2 (4) = 9,827$ ,  $p = 0,043$ ; by gender and for a  $\chi^2 (4) = 13,829$ ,  $p = 0,008$  as well as by gender and I am a person fulfilled for a  $\chi^2 (4) = 9,039$ ,  $p = 0,060$ . The second hypothesis of the research was: we anticipate that self-valuing of motor deficiencies depends on the nature of the deficiency (inborn or acquired) and the level of education (gymnasium, lyceum, university) of the person with motor deficiencies (people with inborn deficiency with higher studies is better value for yourself). Self-evaluation was investigated through ten items of the questionnaire for which a median Alpha Chronbach Coefficient (0.888) was calculated: I wish I was born the second time; I think I'm a valued man or at least as good as the others; I think I have some remarkable qualities; I incline to think that I am a lost or unfulfilled man; I do not think I have too many things to boast; I have a positive attitude towards my own person; Overall I'm happy with myself; I wish I could have more respect for my own person; From time to time I feel like I'm useless; Sometimes I think I'm not good for anything. People with motor disabilities investigated generally can say that they do not have a low self-worth. Only three of the ten investigated items achieved lower averages: I wish I was born the second time (average - 2.85 for a standard deviation of: 1,343); I wish I could have more respect for my own (average - 2,60 for a standard deviation of 1,208); From time to time I feel that I'm useless (average - 2.87 for a standard deviation of: 1,270). These

items refer to what those people want or how they feel sometimes. For most items, high average values are recorded as follows: I think I'm a value man or at least as good as the others (average - 3.39 for a standard deviation of: 1,152); I think I have some remarkable qualities (average - 3.22 for a standard deviation of: 1,121); I have a positive attitude towards my own (average - 3.37 for a standard deviation of: 1.284); Overall, I am satisfied (average - 3.29 for a standard deviation of: 1,230). For the items with negative forms, there were recorded values that strengthened the idea of self-valorisation: I tend to think that I am a missed or unrealized person (61,30% disagreed subjects, of which 31,2% - partial disagreement and 30.1% - total disagreement); I do not think I have much to boast (48.4% disagreements, of which 33.3% - partial disagreement and 15.1% - total disagreement, plus 28% expresses somewhat); Sometimes I think I'm not good at anything (51.6% disagreements, of which 20.4% - partial disagreement and 31.2% - total disagreement, plus 17.2%, which expressed somehow).

We have found the following positive correlations with a mean value: I think I am a valued person or at least as good as others / I think I have some remarkable qualities ( $\rho=.679$ ,  $p<0.01$ ); I think I am a valued person or at least as good as others / I have a positive attitude towards my own person ( $\rho=.619$ ,  $p<0.01$ ); I think I am a valued man or at least as good as the others / Overall I am pleased ( $\rho=.608$ ,  $p<0.01$ ); I think I'm a valued person or at least as good as others/ I wish I could have more respect for my own person ( $\rho=.613$ ,  $p<0.01$ ); I think I have some remarkable qualities / I have a positive attitude towards my own person ( $\rho=.586$ ,  $p<0.01$ ); I think I have some remarkable qualities / Overall I am pleased ( $\rho=.633$ ,  $p<0.01$ ); From time to time I feel like I'm useless / Sometimes I think I'm not good for anything ( $\rho=.791$ ,  $p<0.01$ ); respectively, positive correlation with high value: I have a positive attitude towards my own person / Overall I am pleased ( $\rho=.783$ ,  $p<0.01$ ); If we look at comparative self-valuing, depending on the nature of the deficiency: innate or acquired, we will see a net distribution of the results in favor of the innate deficiency. People with inborn deficiency are better off than those with a deficiency. We will present the average values and the standard deviation for the items in the questionnaire. So for the item: I wish I was born the second time - an average value of 2.90 was obtained at a standard deviation of 1,324 for congenital deficiencies compared to an average of 2,63 at a standard deviation of 1,455 for those who have acquired the deficiency. Under item: I think I am a valued man or at least as good as the others - an average value of 3.56 was obtained at a standard deviation of .909 for congenital deficiencies compared to an average of 2.50 at Standard deviation of 1,713 for those who have deficient. For I think I have some remarkable qualities - an average value of 3.39 was obtained at a standard deviation of .934 for inborn deficiencies compared to an average of 2.38 at a

standard deviation of 1.544 for those who have acquired deficiency. Item results: I tend to think I am a missed or unrealized person - a 3.92 average value was obtained at a standard deviation of 1,010 for congenital deficiencies compared to an average of 2.38 at a standard deviation of 1.544 for those who have acquired the deficiency. Under item: I do not think I have much to praise - a 3.45 average value was obtained at a standard deviation of 1,020 for congenital deficiencies compared to an average of 2.71 at a standard deviation of 1,637 for those who have acquired the deficiency. I have a positive attitude towards my own - an average of 3.57 was obtained at a standard deviation of 1,129 for congenital deficiencies compared to an average of 2.38 at a standard deviation of 1,544 for those who have acquired the deficiency. For the issue: Overall, I am satisfied - an average value of 3.48 was obtained at a standard deviation of 1.071 for birth defects compared to an average of 2.38 at a standard deviation of 1.544 for those who have acquired deficiency. Under item: I wish I could have more respect for my own - a 2.68 average value was obtained at a standard deviation of 1.057 for congenital deficiencies compared to an average of 2.25 at a standard deviation of 1,770 for those who have acquired the deficiency. For: From time to time I feel unnecessary - an average value of 3.05 was obtained at a standard deviation of 1,180 for congenital deficiencies compared to an average of 2.00 at a standard deviation of 1,366 for those who have acquired the deficiency. Finally, for the item: Sometimes I think I'm not good at anything - a 3.66 average value was obtained at a standard deviation of 1,284 for birth defects compared to an average of 1.88 at a standard deviation of 1.408 for those who have acquired the deficiency.

Calculation of Chi square values brings significant differences after *I think that I am a wobbler or at least as good as the others* and the nature of the deficiency (innate or acquired) for a  $\chi^2 (4) = 21,721$ ,  $p = 0,000$  with a moderate effect a Phi  $\phi = 0.483$ . Significant values for the Chi Square test have been recorded: by the nature of the deficiency (innate or acquired) and *I think I have some remarkable qualities* for a  $\chi^2 (4) = 16,521$ ,  $p = 0,002$  with a moderate effect for a Phi  $\phi = 0,421$ ; by the nature of the deficiency (innate or acquired) and *I do not think I have many things to praise for* an  $\chi^2 (4) = 20.148$ ,  $p = 0.000$  with a moderate effect for a coefficient Phi  $\phi = 0.471$ ; as well as the nature of the deficiency (innate or acquired) and Overall, *I am pleased overall* with a  $\chi^2 (4) = 17,029$ ,  $p = 0,002$  with a moderate effect for a Phi  $\phi = 0,428$ . 5.

## 5. Conclusions

Women more than men feel that the presence of disability affects their attitude towards themselves and to life. Women are the ones who develop jealousy toward those who do not face the same difficulty - an average of 2.51 at a standard deviation of .211 compared to men who are jealous of other people - with an average of 2.51 per deviation standard .211. Women are the ones who complain without reason more than men - an average of 2.73 at a standard deviation of .990 against men who complain without reason - an average of 1.98 at a standard deviation of 1.087. Women are more dissatisfied with their lives than men - an average of 2.70 at a standard deviation of 1,127 compared to men who are satisfied with their lives with an average of 3.13 at a standard deviation of 1,127. Women are unhappier with their lives than men - an average of 2.76 at a standard deviation of 1,065 compared to men who are happy - with an average of 3.21 at a standard deviation of .825. All participating women are more unfulfilled than men. - an average of 2.86 at a standard deviation of 1,084 vs. men with an average of 3.08 at a standard deviation of .900. Self-valuing by comparison, depending on the nature of the deficiency: innate or acquired, presents a distribution of results in favor of the innate deficiency. Motorized deficiencies that have been born with motor incapacity are better off than those who have acquired shortages throughout their lives. Thus, inherited motor deficiencies consider themselves to be valuable or at least as good as others - an average value of 3.56 at a standard deviation of .909 compared to an average of 2.50 at a standard deviation of 1,713 for those who have acquired the deficiency. Inborn motoric deficiencies are believed to have some remarkable qualities - the average of 3.39 at a standard deviation of .934 compared to an average of 2.38 at a standard deviation of 1.544 for those who have acquired the deficiency. Positive attitude towards one's own have all those with inborn deficiency - the average of 3.57 at a standard deviation of 1,129 compared to an average of 2.38 at a standard deviation of 1,544 compared to those who have acquired the deficiency. Thanks to them are all those with inborn deficiency - the average of 3.48 at a standard deviation of 1,071 vs. an average of 2.38 at a standard deviation of 1,544 for those who have acquired the deficiency.

## References

- Bult, M.K.; Verschuren, O.; Jongmans, M.J.; Lindeman, E.; Ketelaar, M. (2011). [What influences participation in leisure activities of children and youth with physical disabilities? A systematic review.](#) *Research in Developmental Disabilities* Volume 32, (5), 1521-1529
- Van Campen, C.; Cardol, M. (2009). [When work and satisfaction with life do not go hand in hand: Health barriers and personal resources in the participation of people with chronic physical disabilities](#) *Social Science & Medicine*, 69, (1), 56-60.
- Dvir, N. (2015). [Does physical disability affect the construction of professional identity? Narratives of student teachers with physical disabilities](#) *Teaching and Teacher Education*, 52, 56-65.
- Gaskin, C. J.; Andersen, M. B.; Morris, T. (2010). [Sport and physical activity in the life of a man with cerebral palsy: Compensation for disability with psychosocial benefits and costs.](#) *Psychology of Sport and Exercise*, 11 (3), 197-205.
- Lovelock, B.A. (2010). [Planes, trains and wheelchairs in the bush: Attitudes of people with mobility-disabilities to enhanced motorised access in remote natural settings.](#) *Tourism Management*, Volume 31 (3), 357-366.
- Law, M.; Petrenchik, T.; King, G.; Hurley, P. (2007). [Perceived Environmental Barriers to Recreational, Community, and School Participation for Children and Youth With Physical Disabilities.](#) *Archives of Physical Medicine and Rehabilitation*, 88, (12), 1636-1164.
- Martin, J. J.; Choi, Y. S. (2009). [Parents' physical activity-related perceptions of their children with disabilities.](#) *Disability and Health Journal*, Volume 2 (1), 9-14.
- McDermott, S.; Turk, M.A. (2011). [The myth and reality of disability prevalence: measuring disability for research and service.](#) *Disability and Health Journal*, 4(1), 1-5.
- Nkabinde, Z. P.; Obiakor, F.E., Offor, M.T.; Smith, D.J. (2010). [Educating Children with Physical Disabilities.](#) *International Encyclopedia of Education (Third Edition)*, 640-645.
- Ogilvie, R.; Foster, K.; McCloughen, A.; Curtis, K. (2015). [Family members' experience of providing support for young people with traumatic physical injury during the acute hospital phase of care: A qualitative study.](#) *Injury*, 46, (9), 1834-1840.
- Schreuer, N.; Sachs, D.; Rosenblum, S. (2014). [Participation in leisure activities: Differences between children with and without physical disabilities.](#) *Research in Developmental Disabilities*, Volume 35, (1), 223-233.

- Stănescu, R. (2014). [Wheelchair Tennis – An Opportunity for Social Integration of the People with Disabilities](#) Original Research Article *Procedia - Social and Behavioral Sciences, Volume 149* (5), 906-910.
- Stevens, S. E.; Steele, C. A.; Jutai, J. W.; Kalnins, I. V.; Bortolussi, J. A.; Biggar, W. D. (1996). [Adolescents with physical disabilities> Some psychosocial aspects of health.](#) *Journal of Adolescent Health, Volume 19*, (2), 157-164.
- Stewart, M.; Barnfather, A.; Magill-Evans, J.; Ray, L.; Letourneau, N. (2011). [Brief report: An online support intervention: Perceptions of adolescents with physical disabilities.](#) *Journal of Adolescence, Volume 34*, (4), 795-800.
- Tate, D. G; Riley, B. B.; Perna, R.; Roller, S. (1997). [Quality of life issues among women with physical disabilities or breast cancer.](#) *Archives of Physical Medicine and Rehabilitation, 78*, (12-5), S18-S25.
- Trani, J.-F.; Ballard, E.; Peña, J. B. (2016). [Stigma of persons with disabilities in Afghanistan: Examining the pathways from stereotyping to mental distress.](#) *Social Science & Medicine, 153*, 258-265.
- White, G. W.; Gonda, C.; Peterson, J. J.; Drum, C. E. (2011). [Secondary analysis of a scoping review of health promotion interventions for persons with disabilities: Do health promotion interventions for people with mobility impairments address secondary condition reduction and increased community participation?](#) *Disability and Health Journal, 4* (2), 129-139.
- Wilson, P. G.; Reid, D. H.; Green, C. W. (2006). [Evaluating and increasing in-home leisure activity among adults with severe disabilities supported independent living.](#) *Research in Developmental Disabilities, Volume 27*, (1), 93-107.
- Yalon-Chamovitz, S.; Weiss (Tamar) P. L. (2008). [Virtual reality as a leisure activity for young adults with physical and intellectual disabilities.](#) *Research in Developmental Disabilities, 29*, (3), 273-287.

# **CURVES AND LINES IN STATISTICS – THE IMPLICATIONS OF CURVILINEAR RELATIONSHIP BETWEEN VARIABLES IN A RESEARCH ABOUT THE EFFECTS OF ONLINE FREEDOM OF SPEECH ON VICTIM EMPATHY IN CYBERBULLYING INCIDENTS**

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**Abstract:** *In 2004, Suler referred to the online disinhibition effect, arguing that online environments unleash aspects of individual's personality that normally would have been kept under guard, thus the online hate speech flourishes. Another recent finding gives arguments for the actual detached voyeurs' generation, underlying that by observing on screen, terrible things happening to other people, we develop our own experience towards the victim, but at an emotional distance. The more we observe terrifying events happening to other people, the more they reinforce our sense of denial and detachment, thus resulting a lack of victim empathy. Our research team has developed the project Keeping youth safe from Cyberbullying, ID 2016-3-TR01-KA205-036619 aiming to deeper understand the dynamics of different cyberbullying aspects in online environments among youth, by creating an online questionnaire composed by single item research questions related to core concepts and perceptions about cyberbullying motives and effects. Our focus is in analyzing the effects of online freedom of speech agreement on victim empathy in cyberbullying incidents, seen as two core concepts in bystanders' mindset, in 140 high school students. Results show that when modelling effects of online freedom of speech agreement on victim empathy, the curvilinear model (13%) is more consistent than the linear model (9%), even if both models show statistical significance. Psychological and methodological conclusions and implications are discussed.*

**Key words:** *cyberbullying; perceived online freedom of speech; victim empathy; curvilinear relationship;*



## **1. Introduction**

Without freedom of expression there is no exchange of ideas, there is no public debate, there is no possibility to be informed, to choose or to express ourselves artistically. Our everyday choices, the way we dress, the music we are listening to, the books we read, the media we are informing about, are all expressions of the right to freely express. Freedom of expression, a major topic of interest for the European Court of Human Rights in recent times, has earned new valences. As stipulated, the moderator of an internet forum cannot be held accountable to the court for injurious or rude comments, if they do not contain a hate speech or a call to violence, thus ECHR "revolutionizing" the freedom of expression in the online environment.

There are hundreds of millions of content creators and recipients over the Internet. They are present on blogs, forums, social networks and various other online communities. Both categories exercise, in different ways but from positions of total legal equality, the right to free expression. This freedom, however, has the same limitations as for any other media. Everyone has the right to free speech, but within certain limits. Freedom of expression consists of thoughts, ideas, opinions, beliefs, creations, but also in tastes, habits and options, affirmed without any constraints and limitations, in public. Generically it implies both acts of speech and writing, as well as acts of affirmative or negative conduct. Expression can be accomplished in speech, in writing, through images and sounds, or by mimics and gestures. The environments in which we express ourselves are either offline or online publications, public space in a physical sense, and any other means of communication in public, including electronic media. Anonymity can better secure privacy and, at the same time, enhance freedom of speech, especially over the Internet, where the anonymity of the presence of people stimulates the formulation of useful opinions and comments, but which can often be so challenging that, in the absence of anonymity, their author would be discouraged from expressing them. Obviously, the condition of legality is that its anonymity does not by itself become a threat to the privacy of others, as well as others' values protected by society. In conclusion, freedom of expression is guaranteed, but it must not be understood in an absolute way, not even over the Internet.

Our approach is centered on the answer to when does freedom of speech turn into cyberbullying. Recent statistics prove a disastrous picture of this threshold being exceeded. According to the Cyberbullying Research Center: over 80 percent of teens use a cell phone regularly, making it the most popular form of technology and a common medium for cyberbullying; about half of young people have experienced some form of cyberbullying, and 10 to 20 percent experience it regularly; mean, hurtful comments and

spreading rumors are the most common type of cyberbullying; girls are at least as likely as boys to be cyberbullies or their victims; boys are more likely to be threatened by cyberbullies than girls; cyberbullying affects all races; cyberbullying victims are more likely to have low self-esteem and to consider suicide; cyberbullying is the biggest part of 4500 teen suicides.

Essentially, cyberbullying represents a repeated, intentional act of aggression mediated through some form of electronic contact. Researchers estimates that many of these adolescents that become victims of cyberbullying suffer from reduced self-esteem and depression as a result. Taken to a higher level, besides direct victimization, 70% of internet users have up to a point witnessed some form of online harassment. Research concludes that even if data show a high percentage of bystanders, persons who could potentially stop the online harassment, in most of the cases these witnesses remain idle, silent about the event that took place before their eyes.

Scientific literature consistently reports that people rarely intervene in bullying incidents, particularly online due to the bystander effect, a social behavior phenomenon first identified by social psychologists John Darley and Bibb Latané in the late 60s and early 70s (**Darley, & Latané, 1968, 1970**). Authors found that most people who witness an emergency do not assist when there are other witnesses, or bystanders, to the event, refraining from helping because of the belief that another bystander will eventually interfere and act. Alternatively, if no one takes action and helps the victim, bystanders assume that the norm is to not act, thus to not help.

When moving the theory into the online setting, nowadays research conclusions underline that while the Internet makes communication much easier, it doesn't necessarily make bystander intervention more likely. Even if myriad of bystanders can see an aggressive post or a request for help, few people actually respond. This fact can be explained by the bystander effect, stating that witnesses will immediately assume that someone else will act, or other people have already responded. Online witnesses are less likely to intervene due to the psychologically separation in terms of physical distance and time of occurrence of the aggressive event, thus the spatial and temporal distance offers bystanders reasons to believe that means that there's nothing to be done to help stop online aggression. None of the less, if the internet provides few options for adults to stop the aggression, for youth this process is even more difficult. It is well known the fact that youth are in generally unwilling to tell responsible adults about cyberbullying incidents, because of different types of fear most of them related to shame, becoming a target themselves, internet browsing deprivation and many others.

As a general conclusion, most research found that bystanders become active in reporting cyberbullying incidents when they empathize with the victim. A lot of prevention programs regard youth empathetic training

through role plays and theatre forums presenting different real cases of youth being online psychologically abused, with the purpose of raising empathetic responses towards the victim.

## 2. Research methodology

The Erasmus project *Keeping youth safe from Cyberbullying*, ID 2016-3-TR01-KA205-036619, was developed by our research team, with the purpose of deeper understand the dynamics of cyberbullying in online environments among youth. Among the first research questions purposed by our team was the identification of the existent relationship between online freedom of speech and victim empathy in cyberbullying. In this regard, we have designed an online questionnaire aiming to gather descriptive data, general perceptions about cyberbullying phenomenon and perceptions about the safety of the educational environment, bystander motives of keeping silent, perceived parental support, and an auto evaluation scale centered on self-efficacy perceptions.

One of our initial interests was in analyzing the relationship between perceptions about online freedom of speech and victim empathy in cyberbullying type incidents, due to the fact that we consider the perceptions youth have about the online freedom of speech impact the amount of emotional investment in empathy towards a victim of online psychological abuse.

Present study takes position that single item measures owns the same efficacy in identifying statistical trends like multiple items scales, regarding online measuring of youth perceptions. Single item measures have been previously successfully used by researchers when measuring for example quality of life (Zimmerman et al., 2006). Single item scales are usually used to represent global constructs (Wanous, Reichers, Hudy, 1997) that are conceptualized as mono facet or dimensions, like the ones we have focused on, online freedom of speech and victim empathy.

The two items that measure online freedom of speech and victim empathy:

**Item A6** – *Please rate your opinion regarding the following affirmation: I have the right to say online anything I want, even if my words hurt somebody.*

1. *Totally agree.*
2. *Agree.*
3. *Neutral.*
4. *Disagree.*
5. *Totally disagree.*

**Item 8** – *What do you feel about victims in online harassment?*

- a. *They deserve it.*

- b. I am sorry, but there is nothing I can do about it.*
- c. That is a serious problem we have to stop.*

Our hypothesis states that two research variables: online freedom of speech and victim empathy are in a curvilinear relationship. In order to test our curvilinear hypothesis, we have used SPSS' multiple linear regression analysis, based on multiple regression analysis for curvilinear effects, where victim empathy was the dependent variable.

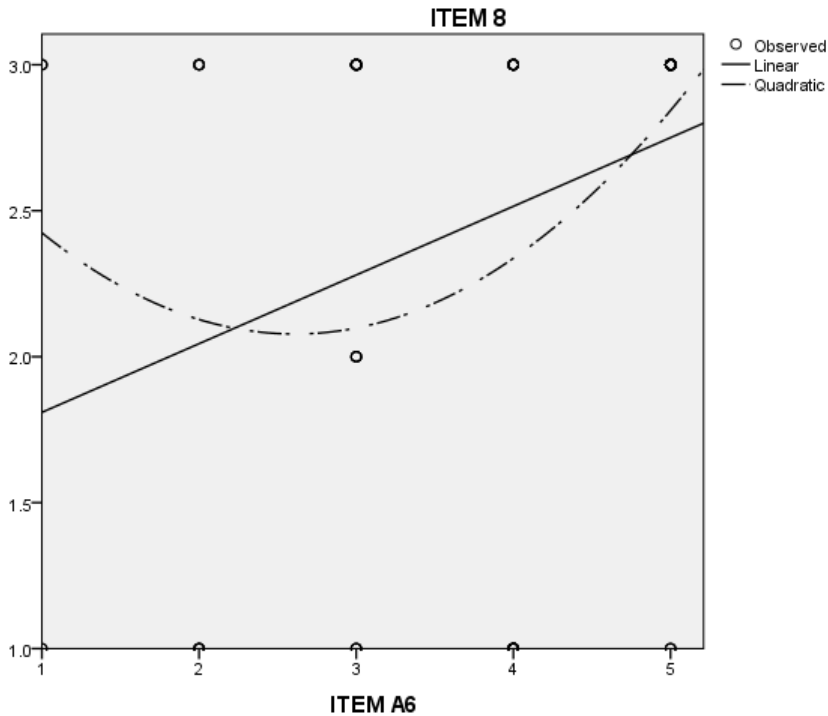
The study was conducted on a random sample of 140 high school students aged 17-19, of both sexes, 68 males (48.6%) and 72 females (51.4%), from both rural and urban environmental origins.

### **3. Results**

In order to test our hypothesis that states that between online freedom of speech and victim empathy there is a curvilinear relationship, we have used a confirmatory factor analysis, based on multiple regression analysis for curvilinear effects.

A curvilinear relationship is described as a relationship between two or more variables which can be graphically depicted by anything other than a straight line. A particular case of curvilinear relationships is the situation where two variables grow together until they reach a certain point (positive relationship) and then one of them increases while the other decreases (negative relationship) or vice-versa, the graphically representation of the function being an U or an inverted U shape.

This relationship can be easily identified graphically by a Scatterplot, choosing additional two representations of the regression line: Linear and Quadratic model, for depicting curvilinear effects. The Scatterplot diagram presented in Figure 1, indicates the curvilinear relationship between online freedom of speech on the horizontal axis and victim empathy, represented on the vertical axis. The sample consists of 140 youth from Arad, Romania.



**Fig. 1.** The curvilinear relationship between online freedom of speech (Item A6) and victim empathy (Item 8)

There is a very high correlation between online freedom of speech perceptions – Item A6 ( $m=4.06$ ,  $SD=1.13$ ) and victim empathy – Item 8 ( $m=2.53$ ,  $SD=0.83$ ) of  $r=.318$  significant at a  $p<.01$  which methodologically allows us to proceed with multiple linear regression analysis.

For curvilinear relationship testing, the present study proposes a hierarchical multiple regression analysis, the dependent variable being victim empathy (Item 8), and the independent variable in step 1 online freedom of speech (Item A6), and in step 2 online freedom of speech (Item A6), and squared online freedom of speech ( $\sqrt{A6}$ ).

Table 1 presents the fitting of the two models, linear – Model 1 and curvilinear/ quadratic – Model 2. As we can see in Model 1 the model that supposes linear relationship, victim empathy accounts for 9% of the variance in online freedom of speech with an  $F=15.579$  significant at a  $p<.01$ . In Model 2, the model that supposes curvilinear relationship, victim empathy accounts for 13% of the variance in online freedom of speech with an  $F=11.780$  significant at a  $p<.001$ .

**Table 1.** Linear and curvilinear regression models for freedom of speech (Item A6) and victim empathy (Item 8)

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.318 <sup>a</sup>	.101	.095	.794
2	.383 <sup>b</sup>	.147	.134	.777

a. Predictors: (Constant), Item A6.

b. Predictors: (Constant), Item A6., sqrtA6

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.828	1	9.828	15.579	.000 <sup>b</sup>
	Residual	87.058	138	.631		
	Total	96.886	139			
2	Regression	14.216	2	7.108	11.780	.000 <sup>c</sup>
	Residual	82.669	137	.603		
	Total	96.886	139			

a. Dependent Variable: Item 8

b. Predictors: (Constant), Item A6

c. Predictors: (Constant), Item A6, sqrtA6

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.574	.251		6.271	.000
Item A6	.235	.060	.318	3.947	.000
(Constant)	2.989	.579		5.160	.000
Item A6	-.699	.351	-.946	-1.989	.049
sqrtA6	.134	.050	1.282	2.697	.008

a. Dependent Variable: Item 8

**Legend – Original romanian questions:**

**Item 8. Question:** Ce simțiți în legătură cu persoanele agresate în mediul online? **Answer:** a. O merită (code 2), b. Îmi pare rău, dar nu am ce să fac în legătură cu asta (code 1), c. Este o problemă serioasă, pe care trebuie să o stopăm (code 3)

**Item A6. Question:** Vă rugăm să vă exprimați părerea cu privire la următoarea afirmație: A6. Am dreptul sa spun ce vreau online, chiar daca cuvintele mele ii ranesc pe ceilalti. **Answer:** a. Acord total (1), Acord (2), Neutru (3), Dezacord (4), Dezacord total (5)

All standardized coefficients of Beta ( $\beta = .318$ ;  $\beta = -.946$  and  $\beta = 1.282$ ) are significant at  $p < .05$  which gives a high consistency to our both models. Changing Beta coefficient's sign from + to - means that the effect is growing in the opposite direction, which demonstrates that the relationship between the two variables: online freedom of speech and victim empathy is not linear, but curvilinear. The additional incremental predictive capacity of 4 percent, added by including the squared online freedom of speech variable which is accounting for the band in the regression line, indicates that there is a curvilinear relationship between online freedom of speech and victim empathy.

This curvilinear relationship demonstrates that extreme aspects, extremely reduced and extremely high levels of agreement to online freedom of speech regardless of consequences, significantly influences the activation of victim empathy type of response, meaning that the participants to an online aggression will feel empathy towards the victim, while situating on the neutral segment of agreement to online freedom of speech, triggers the non-empathetic response towards the victim in a cyberbullying event.

Until now, we are not aware of any research indicating a curvilinear relationship between online freedom of speech agreement and victim empathy, thus, this study may help expanding the current body of knowledge on psychological aspects of triggering empathetic responds towards the victims in online aggressions.

#### 4. Conclusions and implications

As underlined by the scientific literature, empathic training concern is the most important predictor of the abuse report behavior, youth characterized by high levels of empathic concern were more likely to help victims of cyberbullying. As described by the bystander effect, in a cyberbullying event, the non-active behavior is often reinforced by

bystanders who consent approve their acts by not reporting the incident, thus not helping the victim. Such conclusions explain why intervention programs targeting the behavioral change of bystanders' prove to be effective in reducing bullying (Polanin, Espelage, Pigott, 2012; Salmivalli, Kärnä, Poskiparta, 2011). Only recently, cyberbullying researchers have started to explore the determinants of bystanders' reactive behaviors (Barlińska, Szuster, Winiewski, 2013; Freis, Gurung, 2013; Li, Fung, 2012; Macháčková, Dedkova, Sevcikova, Cerna, 2013). Bystanders demonstrated more defending behaviors in the absence of other bystanders, thereby validating the bystander effect in cyberbullying situations; also low moral disengagement, low anti-social conformity, high perceived control of the situation and bad relationship with bullies were identified as significant predictors of a bystander's defending tendency (Song, Oh, 2018).

The social conclusion of this research is that cyberbullying risk is the dark side of online free speech. As technology continues to outgrow and become an important tool in everyday communication, societies have to invest more interest in protecting youth from the impacts of hurtful and threatening communication and protecting in the same time the youth online freedom of speech. Is well known the fact that harassment owns the effect of silencing free speech, but as a democratic society responding to censorship with more censorship does not represent a mature answer. Rather than silencing even more the youth freedom of speech that does not represent cyberbullying, societies should approach the subject with creativity, compassion and empathy.

### References:

- Barlińska, J., Szuster, A., Winiewski, M. (2013). Cyberbullying among adolescent bystanders: Role of the communication medium, form of violence, and empathy. *Journal of Community & Applied Social Psychology*, 23(1), 37-51.
- Darley, J.M. & Latané, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology*. 8: 377–383.
- Darley, J.M., & Latane, B. (1970). The unresponsive bystander: why doesn't he help? New York, NY: Appleton Century Crofts.
- Freis, S.D., Gurung, R.A. (2013). A Facebook analysis of helping behavior in online bullying. *Psychology of Popular Media Culture*, 2(1), 11-19.
- Li, Q., & Fung, T. (2012). Predicting student behaviors: Cyberbullies, cybervictims, and bystanders. In Q. Li, D. Cross & P. K. Smith (Eds.), *Cyberbullying in the global playground: Research from international perspectives* (pp. 99–114). Oxford, England: Wiley-Blackwell.



- Machackova, H., Dedkova, L., Sevcikova, A., & Cerna, A. (2013). Bystanders' support of cyberbullied schoolmates. *Journal of Community and Applied Social Psychology*, 23, 25-36. <http://dx.doi.org/10.1002/casp.2135>
- Polanin, J.R., Espelage, D.L., Pigott, T.D. (2012). A meta-analysis of school-based bullying prevention programs' effects on bystander intervention behavior. *School Psychology Review*, 41, 47-65.
- Salmivalli, Christina, Antti Kärnä, and Elisa Poskiparta. (2011). Counteracting Bullying in Finland: The KiVa Program and Its Effects on Different Forms of Being Bullied. *International Journal of Behavioral Development* 35:405–11.
- Song, J. & Oh, I. (2018). Factors influencing bystanders' behavioral reactions in cyberbullying situations. *Journal Computers in Human Behavior*, Volume 78, Issue C, 273-282.
- Suler, J. (2004). The Online Disinhibition Effect. *CyberPsychology & Behavior*, 7(3), pp.321-326.
- Wanous, J.P., Reichers, A.E., Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, 82, 247-252.
- Zimmerman, M., Ruggero, C.J., Chelminski, I., Young, D., Posternak, M.A., Friedman, M., Boerescu, D., Attiullah, N. (2006). Developing brief scales for use in clinical practice: the reliability and validity of single-item self-report measures of depression symptom severity, psychosocial impairment due to depression, and quality of life. *J Clin Psychiatry*, 67(10), 1536-1541.

## THE VALUES AND ATTITUDES OF THE ADOLESCENTS ASSOCIATED TO WEARING THE SCHOOL UNIFORM

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**Abstract:** *This study highlights individual effects, which the implementation of school policy has in terms of wearing the school uniform on students' attitudes and values. The survey was the investigation method which was applied through a questionnaire built to highlight attitudes and differences concerning the effects of school unit policy on self-esteem and student behavior. A number of 100 students aged between 14 and 19 were investigated. The results of the study show that there are statistically significant differences between girls and boys regarding opinions on behaviors and emotions that they have as a consequence of wearing school uniforms. Girls consider to a greater extent than the boys that uniform gives the student a sense of pride and belonging to the group. The boys consider that school uniform is a symbol of restricting student freedom to a greater extent than girls. The study conveys current empirical evidence to support the policy of adopting the school uniform.*

**Keywords:** *school uniform; organizational culture; self-esteem;*

### 1. Introduction

This article addresses the school as an organization, primarily using concepts such as organizational culture, values, norms and behavioral patterns. The study focuses on the effects that schools organizational culture has at a behavioral and attitude - value level on the individual.

According to Emil Păun, the organization is "a consciously well-founded social unit or group, with explicitly formulated goals, which trains a large number of individuals to fulfill well-defined roles and statutes within a differentiated structure with leadership and coordination functions of activities" (Păun E., 1999, p. 8). The school is seen, in pedagogical studies, as an institutional factor of education (Şerban, I., 2005). Therefore, school requires conducting certain educational activities in an organized social framework, with the required pedagogical activities, that take place over a determined period and at the same time, in relation to the internal regulations of the educational establishment (E. Peacock, 1999; Cristea, S., 2004).

Some specialists state that the school represents "an organization that performs a pedagogical activity in a specialized institutionalized framework with socially defined statutes and roles in order to achieve the micro-

structural outcomes of the educational process (general and specific objectives) and the macro structural outcomes of the educational system (the ideal of education and general strategic goals) "(Cristea, S., 2004, pag12).

Culture defines an ensemble of values, norms and behaviors of an individual or a group of individuals, as a system of cultural agreements to which it converges a multitude of particular manifestations (Brunnsma, D. L., & Rockquemore, K. A., 1998; Anderson, W., 2002). Other authors consider that the identity of each organization is given by a set of values which are found strictly in the technical component of an organization (Paun E., 1999).

The concept of organizational culture is defined as a particular system of values, leadership beliefs, evocations, meanings, and ways of thinking, used by members of an organization as appropriate, which will condition the behavior of members both within and beyond the organization (Cristea, S., 2004, p. 12). The normative culture is defined as the formal aspect, the visible side of the organizational culture, hence the fact that the normative dimension is in close connection with the organizational culture. The normative culture is presented in the documents which establish the activity of the institution as being formed by certain rules, norms (Cristea, S., 2009).

The analysis of the organizational culture is based on certain visible surface elements, as: symbols and slogans, rituals and ceremonies, "myths" and "heroes", behavioral patterns, clothing, physical attitudes, slang (Gentile, E. & Imberman, S. A., 2012). Symbols and slogans are formed by few and ordinary visual and auditory elements and represent the totality of the core values and the individuality of the organization. Symbols and slogans have a major influence on student decision-making. Rituals and ceremonies expose and support the values favored by the school organization, thus we have several types of rituals (Huss, J.A., 2007).

Behavioral methods also express fundamental elements of the organizational culture. Amongst these patterns of behavior, we mention: the way in which the headmaster is greeted indicates the managerial style chosen in the institution and the way the members of the organization are perceived; the way in which teachers choose their outfit, or what they think of uniforms; the way in which the centering is done in the school organization, dividing it into two branches, focusing on a student or focusing on the teacher (Happel, A., 2013).

The slang can symbolize a status that expresses the professionalism of the workforce and other elements of corporate culture (Jamison, D. J., 2006). Therefore, the school can be defined both as an organizational culture and as an ensemble of organizational subcultures, and in order to identify subcultures, a variety of classification criteria are reported.

### ***1.1. The self-esteem associated with the school uniform***

From an etymological point of view, the term comes from the Latin "oestimare" meaning to estimate, evaluate. Likewise, the term *self-esteem* is attributed to a wide range of synonyms, thereby in some specialized papers we can identify it in the form of: self-esteem, self-appreciation, self-satisfaction, self-loving (Lupu D., 2011).

Depending on the life experiences, self-esteem may vary in a positively or negatively direction (Hendrick, J., 2002). It is heavily influenced by beholders (school / family) hence the fact that self-esteem is gradually being formed throughout lifetime. Not only educational factors influence self-esteem, but also other factors such as: introversion, extraversion, gender as well as social factors or economic factors (Harter, S., 1999).

In the school environment, the child has the opportunity to assert, he can claim a feeling of his ego, and a clear vision about life. It must be underlined that in the school environment, from the point of view of self-esteem, the grades have the most important role (Harter, S., 1989). The grades are the factor that can influence in a large or small measure self-esteem, being the index of performance.

Specialists still face the issue regarding the fairness of the term of self-esteem or self-esteems, and this dilemma is signaled by Christophe André and Francois Lelord who consider self-esteem represents a whole being formed by more self-esteem, each belonging to another domain, each of which can operate independently to each other. A student may have a relatively high level of self-esteem at the school / academic level, and a relatively low self-esteem at a physical level. All these authors admitted the following components as areas of self-esteem: physical appearance along with physical capabilities as well as information about the professional area (Christophe A., François L., 2000).

Some research identifies five distinct areas of self-esteem: "academic competence, athletic competence, social acceptance, physical appearance and behavior" (Harter, S., 1999). The individual emphasizes himself, analyzes and perceives himself first as a *physical reality*, after which he creates a much more complex and less objective image of the *physical ego*. To this image there are assigned certain judgments, some of them more or less adequate.

Another study reports the fact that boys' self-esteem is more stable during the period from 14 to 23 years old, compared to girls, who starting with the age of 8 years old their self-esteem may decrease due to how they perceive their appearance, compared to boys, where the level of self-esteem from this point of view remains relatively constant (Harter, S., 1989).

The usage of uniforms in public schools has increased, however the information that we have concerning how much this aspect affects the pupils are relatively few. Each school establishes the admission of uniforms independently, this fact offering variation over schools over time. Studies show that adopting a uniform improves the presence and behavior of students in secondary schools and reduces the likelihood of students dropping out of studies (Happel, A., 2013). Research shows that school uniforms can have a direct impact over school environment and over students' outcomes can have indirect effects due to providing a public symbol that can be perceived as a school obligation (Wilken, I. & Aardt, A, V., 2012). Other studies come and contradict this point of view, arguing the adoption of dress code (Stevenson Jr., Z., & Chunn, E.W., 1991; Cinoglu, M., 2014).

## **2. Methodology**

The overall objective of the study is to identify whether the wearing of school uniform has an influence on students' self-esteem and belonging.

### **2.1. Proposed Objectives:**

1. Identifying the relationship between student behavior when wearing school uniform and self-esteem.
2. Analyzing the relationship between student behavior when wearing school uniforms and group membership.
3. Analyzing existing differences between the categories of respondents depending on the gender categories in terms wearing the school uniform.

### **2.2. Hypotheses:**

1. There is a statistically significant correlation between student behavior when wearing school uniform and self-esteem.
2. We assume that there are statistically significant differences between behavioral characteristics of students depending on their gender when wearing school uniforms.
3. We assume that there are statistically significant differences at the level of belonging to the group among students who wear school uniform depending on their gender.

### **2.3. Description of participants**

The research group consists of 100 students from a theoretical high school, whose age is between 14 and 19 years old. Thus, we identified 12% as being 14-15 years old, 38% between 16-17 years, 28% of those aged between 17-18 years and 22% between 18-19 years. Out of 100 respondents to the questionnaire, 58 of them respectively 58% are female and 42 respectively 42% are male. The students come from different areas, thereby there are: 64 people respectively 64% who reside in rural area and 36 people respectively 36% who reside in urban area.

### **2.4. Method and applied instrument:**

In order to realize this pedagogical research, we used the social survey method, the instrument used to be the questionnaire. It comprises a total of 19 items, 18 of them with answer options, and 1 item with a free answer. It should be noted that the selected items are structured according to the hypotheses of the research. Thus, the first items (1-4) are based on the values collected by the students associated with uniform wear, items 5 to 8 refer to group affiliation, items 9 to 12 reflect their attitude towards the school uniform, 13 to 16 show changes in self-esteem associated with uniform wear. At the end of the questionnaire we can find 3 items (17-19) which refer to the respondents' identification data.

After applying the statistical procedure, we determined a good average Alpha Cronbach coefficient of 0.73. This coefficient enables the continuation of the analysis as the level of the internal consistency of the instrument's items is reasonable, demonstrating that the instrument measures what it is aimed to measure.

## **3. Results**

The descriptive analyze shows that 66% of the students prefer the existence of a dress code and 34% of the total of respondents prefer the uniform. A proportion of 78% of students reported that the uniform confers a group affiliation and 22% believe that the uniform does not give the student an affiliation status to a group. Moreover, 60 subjects (60% of responses) stated that when wearing school uniform, they tend to feel positive emotions, and 40% tend to feel negative emotions. According to their answers, 60% of respondents answered that they feel: accepted, well, comfortable, like students, like others, proud, normal, organized, respected and sure on themselves. On the other hand, 40% of the respondents answered that they feel: constrained, disturbed, labeled, incapable, imprisoned, inconvenient, discomfort, indecent, indifferent, bad, bound, obliged or restricted.

It is pointed out that 17% of the students believe that when they wear school uniforms they are always proud of oneself, 17% of them are often proud of oneself, 30% stated they are proud of their oneself only sometimes, 17% believe that when wearing uniforms rarely happen to be proud of oneself and 19% of them state that when wearing uniforms, they are not proud of oneself.

Another pursuit of the study is to verify whether there is a statistically significant correlation between student behavior when wearing school uniform and the level of self-esteem. As we can observe in Table No. 1 *Correlation between behavior and self-esteem*, between item Q9 (*Do you consider school uniform to be welcomed in school?*) and item Q4 (*Do you think the school uniform is meant to teach students what a decent behavior is?*), we identify a strongly significant correlation ( $r = 0.33$ , where  $p = 0.01$ ), which indicates that respondents thought that school uniforms are welcomed and agree that the uniform teaches students what a decent behavior is.

Respondents who believe that school uniforms have the role of teaching students what is a decent behavior have also reported that they feel more respectful when they wear school uniforms (Q4 and Q13,  $r = 0.35$ , where  $p \leq 0.01$ ). Respondents who believe that school uniforms have the role of teaching students what is decent behavior are also satisfied with oneself (Q4 and Q14,  $r = 0.41$ , where  $p \leq 0.01$ ). Those who associate the school uniform with adopting a decent behavior also have a sense of pride (Q4 and Q15,  $r = 0.42$ , where  $p \leq 0.01$ ). Students who reported that the uniform teaches them a more decent behavior tend to integrate faster because of school uniform (Q4 and Q16  $r = 0.39$ ,  $p \leq 0.01$ ). Students who believe that the school uniform is welcomed consider that the uniform encourages to a civilized behavior (Q8 and Q9,  $r = 0.29$ ,  $p \leq 0.01$ ).

We note a strongly negative significant correlation ( $r = -0.29$ ,  $p \leq 0.01$ ) at the level of Q8 items (*School uniform is a call to civilized behavior in society as the student is easier to identify*) and Q10 (*Do you consider that in your school should be introduced a uniform or just a dress code?*). Within this correlation, we note that students who consider that school uniform is a stimulus for civilized behavior are those who adopt the wearing of school uniform.

Another significantly strong correlation ( $r = 0.29$ ,  $p \leq 0.01$ ) was identified between Q8 (*School uniform is a call to civilized behavior in society as the pupil is easier to identify*) and Q13 (*When I wear a school uniform I feel more respected*). Students who are typically more respected when wearing a school uniform also consider that uniform is an incentive to civilized behavior.

We observe another strongly significant correlation ( $r = 0.51$ ,  $p \leq 0.01$ ) between items Q8 (*School uniform is a call to civilized behavior in society as*

*the pupil is more easily identifiable*) and Q14 (*When I wear school uniform I tend to be more pleased with oneself*), which shows that students who consider that school uniform is a stimulus for civilized behavior tend to be more satisfied with oneself.

We note a strongly significant correlation ( $r = 0.42$ ,  $p \leq 0.01$ ) between items Q8 (*School uniform is a call to civilized behavior in society as the pupil is easier to identify*) and Q15 (*School uniform gives me a sense of pride*). It indicates that students who consider that the uniform encourages them to behave in a civilized manner also have a sense of pride apart from those who do not wear school uniforms.

We find that there is a significant correlation ( $r = 0.24$ ,  $p \leq 0.01$ ) between items Q8 (*School uniform is a call to civilized behavior in society as the pupil is easier to identify*) and Q16 (*Wearing school uniform helps me to integrate more quickly*) since students who believe that school uniforms encourage civilized behavior also help them to integrate more quickly into society.

Students who agree with school uniform tend to feel more esteemed (Q9 and Q13,  $r = 0.28$ ,  $p \leq 0.01$ ). Those who consider that the uniform in school is welcomed tend to feel more satisfied with oneself (Q9 and Q14,  $r = 0.41$ ,  $p \leq 0.01$ ) and have a sense of pride conferred by it (Q9 and Q15,  $r = 0.34$ ,  $p < 0.01$ ). Students who consider that uniform is welcomed tend to be easily integrated due to it (Q9 and Q16,  $r = 0.36$ ,  $p \leq 0.01$ ).

We notice a significant correlation ( $r = -0.23$ ,  $p \leq 0.01$ ) between items Q10 (*Do you consider that in your school should be introduced a uniform or just a dress code?*) and Q13 (*When I wear a school uniform I feel more respected*). It indicates the fact that students who feel respected when wearing school uniform do not think that a dress code should be introduced. Also, those who choose the school uniform are more satisfied with oneself (Q10 and Q14,  $r = 0.34$ ,  $p \leq 0.01$ ), express a sense of pride when wearing the school uniform (Q10 and Q15,  $r = -0.25$ ,  $p \leq 0.01$ ), and consider that they integrate faster when a school uniform compared to alternative, the dress code (Q10 and Q16,  $r = -0.27$ ,  $p \leq 0.01$ ).

We note that students who feel more respected while wearing school uniform also have a sense of pride (Q13 and Q15,  $r = 0.67$ ,  $p \leq 0.01$ ), a tendency to be more satisfied with oneself (Q13 and Q14,  $r = 0.67$ ,  $p \leq 0.01$ ) and tend to integrate more quickly into a collective (Q13 and Q16,  $r = 0.64$ ,  $p \leq 0.01$ ).



Table No. 1 Correlation between behavior and self-esteem

		Q4	Q8	Q9	Q10	Q13	Q14	Q15	Q16
Q4	Pearson Correlation	1	0,19	<b>0,33**</b>	-0,18	<b>0,35**</b>	<b>0,41**</b>	<b>0,42**</b>	<b>0,39**</b>
	Sig. (2-tailed)		0,05	0,00	0,05	0,00	0,00	0,00	0,00
	N	100	100	100	100	100	100	100	100
Q8	Pearson Correlation		1	<b>0,29**</b>	<b>-0,29**</b>	<b>0,29**</b>	<b>0,51**</b>	<b>0,42**</b>	<b>0,24*</b>
	Sig. (2-tailed)			0,00	0,00	0,00	0,00	0,00	0,01
	N		100	100	100	100	100	100	100
Q9	Pearson Correlation			1	<b>-0,28**</b>	<b>0,28**</b>	<b>0,41**</b>	<b>0,34**</b>	<b>0,36**</b>
	Sig. (2-tailed)				0,00	0,00	0,00	0,00	0,00
	N			100	100	100	100	100	100
Q10	Pearson Correlation				1	<b>-0,23*</b>	<b>-0,34**</b>	<b>-0,25**</b>	<b>-0,27**</b>
	Sig. (2-tailed)					0,20	0,00	0,00	0,00
	N				100	100	100	100	100
Q13	Pearson Correlation					1	<b>0,65**</b>	<b>0,67**</b>	<b>0,64**</b>
	Sig. (2-tailed)						0,00	0,00	0,00
	N					100	100	100	100
Q14	Pearson Correlation						1	<b>0,72**</b>	<b>0,60**</b>
	Sig. (2-tailed)							0,00	0,00
	N						100	100	100
Q15	Pearson Correlation							1	<b>0,57**</b>
	Sig. (2-tailed)								0,00
	N							100	100
Q16	Pearson Correlation								1
	Sig. (2-tailed)								
	N								100

\*\* . Strongly significant correlation when  $p \leq 0.01$ .

\* . Significant correlation when  $p \leq 0.05$ .

As shown in *Table no. 2 Test T, T-test results*, for item Q1 (*Do you consider that the uniform is a symbol of restricting the freedom of students?*), we observe that the opinion of the girls in the investigated group have a lower average ( $m = 0.31$ ,  $SD = 0.46$ ) expressing the fact that the school uniform is a symbol of restricting the freedom of students compared to the boys in this group, which have a higher average ( $m = 0.52$ ,  $SD = 0.50$ ), expressing the fact that the uniform is not a symbol with the purpose of restricting the freedom of students, their responses gathering on to the average and above average values of the scale.

Based on the obtained results, it has been found that there are statistically significant differences depending on the variable category of subjects (*Table no.3.5 Test results* for Q1, depending on the variable Category / Gender), regarding Q1 (*Do you consider that the uniform is a symbol of restricting the freedom of students?*) [ $t(98) = 2.18$ ,  $p \leq 0.05$ ]. The

difference between the averages is 0.21 (CI 0.01-0.40). Thus, we mention that the girls consider that uniform restrains the freedom in comparison with what the boys stated.

Table no. 2 Test T, T-test results

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Q1	<b>Equal variances assumed</b>	<b>6,61</b>	<b>0,01</b>	<b>2,18</b>	<b>98</b>	<b>0,03</b>	<b>0,21</b>	<b>0,09</b>	<b>0,01</b>	<b>0,40</b>
	Equal variances not assumed			2,15	84,16	0,03	0,21	0,09	0,01	0,41
Q2	<b>Equal variances assumed</b>	<b>0,09</b>	<b>0,75</b>	<b>-0,15</b>	<b>98</b>	<b>0,87</b>	<b>-0,01</b>	<b>0,09</b>	<b>-0,19</b>	<b>0,16</b>
	Equal variances not assumed			-0,15	89,16	0,87	-0,01	0,09	-0,19	0,16
Q3	<b>Equal variances assumed</b>	<b>4,48</b>	<b>0,03</b>	<b>1,16</b>	<b>98</b>	<b>0,24</b>	<b>0,11</b>	<b>0,09</b>	<b>-0,07</b>	<b>0,30</b>
	Equal variances not assumed			1,14	84,22	0,25	0,11	0,09	-0,08	0,30
Q4	<b>Equal variances assumed</b>	<b>13,58</b>	<b>0,00</b>	<b>-2,24</b>	<b>98</b>	<b>0,02</b>	<b>-0,21</b>	<b>0,09</b>	<b>-0,39</b>	<b>-0,02</b>
	Equal variances not assumed			-2,19	79,93	0,03	-0,21	0,09	-0,40	-0,02
Q5	<b>Equal variances assumed</b>	<b>49,55</b>	<b>0,00</b>	<b>-3,46</b>	<b>98</b>	<b>0,00</b>	<b>-0,27</b>	<b>0,08</b>	<b>-0,43</b>	<b>-0,11</b>
	Equal variances not assumed			-3,23	63,80	0,00	-0,27	0,08	-0,44	-0,10
Q6	<b>Equal variances assumed</b>	<b>2,66</b>	<b>0,10</b>	<b>-0,79</b>	<b>98</b>	<b>0,42</b>	<b>-0,07</b>	<b>0,09</b>	<b>-0,26</b>	<b>0,11</b>
	Equal variances not assumed			-0,80	91,37	0,42	-0,07	0,09	-0,26	0,11
Q7	<b>Equal variances assumed</b>	<b>25,07</b>	<b>0,00</b>	<b>-2,63</b>	<b>98</b>	<b>0,01</b>	<b>-0,22</b>	<b>0,08</b>	<b>-0,39</b>	<b>-0,05</b>
	Equal variances not assumed			-2,51	72,05	0,01	-0,22	0,09	-0,40	-0,04
Q8	<b>Equal variances assumed</b>	<b>2,15</b>	<b>0,14</b>	<b>-0,75</b>	<b>98</b>	<b>0,45</b>	<b>-0,06</b>	<b>0,09</b>	<b>-0,24</b>	<b>0,11</b>
	Equal variances not assumed			-0,74	84,12	0,46	-0,06	0,09	-0,25	0,11
Q9	<b>Equal variances assumed</b>	<b>0,98</b>	<b>0,32</b>	<b>-1,49</b>	<b>98</b>	<b>0,13</b>	<b>-0,15</b>	<b>0,10</b>	<b>-0,35</b>	<b>0,04</b>
	Equal variances not assumed			-1,49	87,41	0,13	-0,15	0,10	-0,35	0,05
Q10	<b>Equal variances assumed</b>	<b>0,05</b>	<b>0,81</b>	<b>0,11</b>	<b>98</b>	<b>0,90</b>	<b>0,01</b>	<b>0,09</b>	<b>-0,18</b>	<b>0,20</b>
	Equal variances not assumed			0,11	88,75	0,90	0,01	0,09	-0,18	0,20
Q11	<b>Equal variances assumed</b>	<b>0,89</b>	<b>0,34</b>	<b>-0,47</b>	<b>98</b>	<b>0,63</b>	<b>-0,02</b>	<b>0,05</b>	<b>-0,13</b>	<b>0,08</b>
	Equal variances not assumed			-0,46	80,16	0,64	-0,02	0,05	-0,13	0,08
Q12	<b>Equal variances assumed</b>	<b>0,66</b>	<b>0,41</b>	<b>-3,88</b>	<b>98</b>	<b>0,00</b>	<b>-0,89</b>	<b>0,23</b>	<b>-1,35</b>	<b>-0,43</b>

	Equal variances not assumed			-3,87	87,90	0,00	-0,89	0,23	-1,35	-0,43
	<b>Equal variances assumed</b>	<b>0,91</b>	<b>0,34</b>	<b>-3,00</b>	<b>98</b>	<b>0,00</b>	<b>-0,79</b>	<b>0,26</b>	<b>-1,32</b>	<b>-0,27</b>
<b>Q13</b>	Equal variances not assumed			-2,97	85,52	0,00	-0,79	0,26	-1,32	-0,26
	<b>Equal variances assumed</b>	<b>0,88</b>	<b>0,35</b>	<b>-4,31</b>	<b>98</b>	<b>0,00</b>	<b>-1,08</b>	<b>0,25</b>	<b>-1,57</b>	<b>-0,58</b>
<b>Q14</b>	Equal variances not assumed			-4,25	83,44	0,00	-1,08	0,25	-1,58	-0,57
	Equal variances assumed	0,93	0,33	-1,62	98	0,10	-0,42	0,26	-0,94	0,09
<b>Q15</b>	Equal variances not assumed			-1,59	82,61	0,11	-0,42	0,26	-0,95	0,10

There are significant statistically differences depending on the variable category of subjects (*Table 2 Test T, T-test results for Q4, depending on the variable Category / Gender*), regarding Q4 (*Do you think that school uniform has the aim to teach students what a decent behavior is?*) [ $t(98) = -2.24$   $p \leq 0.05$ ]. The mean difference is -0.21 [CI (-0.39) - (- 0.02)]. Thus, the boys consider that the uniform is meant to teach students what a decent behavior is, but to a lesser extent than girls.

Boys consider that school uniform provides the student with a sense of pride and a group affiliation feeling, but to a lesser extent than the girls [ $t(98) = -3.46$ ,  $p \leq 0.01$ ]. Girls consider that wearing school uniform gives the student a sense of belonging to an elite school to a greater extent than boys [ $t(98) = -2,63$   $p \leq 0,01$ ]. Boys consider to a lesser extent that wearing school uniform makes them feel more respected ( $t(98) = -3.88$ ,  $p \leq 0.01$ ) and that wearing school uniform gives a sense of pride [ $t(98) = -4.31$ ,  $p \leq 0.01$ ].

#### 4. Conclusions

The assumptions of the study were fully confirmed. The study emphasize that students consider that wearing the uniform they will have the change to integrate more quickly into a collective. The majority of responses stated that when wearing school uniform, they tend to feel positive emotions. They feel accepted, well, comfortable, *like students, like others*, proud, normal, organized, respected and sure on themselves. Also, wearing uniform provoke students to a decent behavior, which is a key element in school regulation policies.

Despite the positive results described above, 40% of the respondents answered that they feel: constrained, disturbed, labeled, incapable, imprisoned, inconvenient, discomfort, indecent, indifferent, bad, bound, obliged or restricted. As a consequence, this highlight the necessity of further investigations and inclusion of other dimensions, unexplored in this research.

Regarding the limitations of this study, we bring into question the difference in the test participants depending on their genre. Thus, the ratio consists of 42% male participants, and 58% female respondents, aspect that may influence the final results. Also, the investigation was conducted using a single test instrument, for which the results cannot be highly representative for the general population. At the same time another limit is the manner used to respond to the questionnaire as participants were "forced" to respond in a dichotomous manner (with "Yes" or "No" answers).

Future research could investigate the issue on a larger batch of population. At the same time, an equal gender sample could give greater clarity regarding gender differences, attitudes and self-esteem associated with wearing school uniforms. Also, the sample could be increased, including other participants from other representative populations (teachers, parents, headmasters). Subsequently, one can build a tool to address students who are part of other institutions that have not yet adopted a school uniform.

## **5. References**

- Anderson, W. (2002). School Dress Codes and Uniform Policies. Policy Report.
- André C. & Lelord F. (2000). Cum să te iubești pe tine pentru a te înțelege mai bine cu ceilalți București : Trei.
- Brunsma, D. L., & Rockquemore, K. A. (1998). Effects of student uniforms on attendance, behavior problems, substance use, and academic achievement. *The Journal of Educational Research*, 92(1), 53-62.
- Cinoglu, M. (2014). Evaluation of School Uniform Policy in Turkey: A Case Study. *International Journal of Progressive Education*, 10(3).
- Cristea, S. (2004). Dimensiunea culturală a organizației școlare, în *Tribuna învățământului*, nr. 988/ 23.II-1.III.
- Cristea, S. (2009). Managementul organizației școlare în *Tribuna Învățământului* nr. 972/ 20-26. X. 2008- 999.
- Gentile, E., & Imberman, S. A. (2012). Dressed for success? The effect of school uniforms on student achievement and behavior. *Journal of Urban Economics*, 71(1), 1-17.
- Happel, A. (2013). Ritualized girling: school uniforms and the compulsory performance of gender. *Journal of Gender Studies*, 22(1), 92-96.
- Harter, S. (1989). "Causes and consequences of low self esteem in children and adolescents". In Baumeister, R. F., Tice, D.M., and Hutton, D.G., "Self-presentational motivation and personality differences in self-esteem", *Journals of Personality*, 57:547-579.

- Harter, S. (1999). Symbolic interactionism revisited: Potential liabilities for the self constructed in the crucible of interpersonal relationships. *Merrill-Palmer Quarterly*, 45, 677-703.
- Hendrick, J. (2002). *The Whole Child*, Toronto: Maxwell Macmillan Canada.
- Huss, J. A. (2007). The role of school uniforms in creating an academically motivating climate: Do uniforms influence teacher expectations? *Journal of Ethnographic & Qualitative Research*, 1.
- Jamison, D. J. (2006). Idols of the tribe: brand veneration, group identity, and the impact of school uniform policies. *Academy of Marketing Studies Journal*, 10(1), 19.
- Lupu, D. (2011). *Implicațiile activităților de consiliere psihopedagogică asupra diadei stima de sine și reușită școlară*. Brașov: Editura Universității Transilvania din Brașov.
- Păun, E. (1999) *Școala: abordare sociopedagogică*. Iași : Polirom.
- Șerban, I. (2005). *Managementul și cultura calității la nivelul unității școlare*. București : I. S. E.
- Stevenson, Z., Jr, & Chunn, E. W. (1991). District of Columbia Public Schools, Washington, DC. *Uniform Policy/Dress Codes: School Staff and Parent Perceptions of Need and Impact*, 32.
- Wilken, I. & Aardt, A, V. (2012). School Uniforms: Tradition, benefit or predicament? *Education as Change*, 16 (1), 159–184.

## RELATIONSHIP BETWEEN THE SOCIOECONOMIC STATUS OF PARENTS AND ACADEMIC PERFORMANCE OF STUDENTS IN ONITSHA NORTH LOCAL GOVERNMENT AREA OF ANAMBRA STATE.

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**Abstract:** *This study was aimed at determining the relationship between socioeconomic status of parents and academic performance of students in Onitsha North L.G.A. of Anambra State. Three research questions and three null hypotheses were formulated to guide the study. Correlation research design was adopted. From a population of 2,452, a sample of 100 respondents selected through the simple random sampling technique was adopted. For data collection, the junior secondary school annual examination was used, while questionnaire was also used to collect relevant information from students. Pearson product moment correlation was used to provide answers to the research questions, while the t- test was used in testing the null hypotheses at 0.05 level of significance. From the results; it was discovered that there is a positive relationship between high socioeconomic status of parents and student's academic performance, also that there is a negative relationship between middle socioeconomic status of parents and student's academic performance, and that there is a positive relationship between low socioeconomic status of parents and student's academic performance. Based on the findings, it was recommended that government should endeavor to implement the Universal Basic Education (UBE) programme, as it will go a long way in helping students attain success in their academic pursuits. With this, the low academic performance of students that is characterized with low socioeconomic status of parents will be minimized.*

**Key words:** *socioeconomic status; parents; academic performance;*

## **Introduction**

In most African countries and in the western world, socioeconomic status of a family is usually linked with the family's income, parental educational level, parent's occupations and social status among their kindred and even at the global level. Ford and Harrison (1997) followed this logic while examining parental influences on African-American students' school achievement by focusing on specific socio-demographic factors including parent's level of education, marital status and family income.

It's generally believed that children from high and middle socio-economic background are better exposed to a learning environment at home because of provision and availability of extra learning facilities. This idea is supported by Becker and Tomes (1979) when they assert that it has become well recognized that wealthy and well educated parent's ensure their children's future by providing them a favorable learning environment, better education and good jobs. In contrast to this belief, children from low socio economic status parents do not have access to extra learning facilities; hence the opportunity to get to the top may not be very easy.

Drummond and Stipek (2004) while discussing "low income" parent's beliefs about their role in their children's academic learning mentioned that their responsibilities were limited to meeting their children's basic and social-emotional support and socializing manners. So these parents shortsightedness towards their responsibilities in their educational process of their children and scarcity of funds to intensify such process could be a challenge to their children's success. But does the affirm impact of low socio-economic status of the parents really account for the student's low academic performances? Studies in some field have established that other factors inspite of socioeconomic status of parents can boost academic success among students, also certain socio-demographic variables account for the academic success or failure of minority students (Smith, Schneider and Ruck, 2005).

However, poor parental care with gross deprivation of social and economic needs of a child, usually yield poor academic performance of the child. When a child also suffers from parental and material deprivation and care due to death, the child's schooling may be affected and he will not be financially buoyant to pay school fees, purchase books and uniforms. Such child may play truancy, thus his performances in school may be adversely affected (Shuttle, 2004).

Studies which examined Nigerian parents, recorded that parents who maintained positive views about the values of education and who hold high academic expectations have children who often experience higher levels of academic achievement (Ford, and Harrison, 1997; Steinberg 1992;). In another dimension, Nyirongo, (1989) states that students belonging to upper

socioeconomic status parents showed better academic performance than students from low socioeconomic status background.

Babcock and Lloyd (2002) on the relationship between school performance and parental socio-economic status conclude that students with high achievement values tend to come from families that are more educated and with a higher status of occupations, since low socio economic status of parents have been seen as hindrance to student's success, it could also lead to poor academic performance of student. An example is that most schools in poor suburban (rural areas) district of Anambra State always performs badly in external examinations like. J.S.S.C.E, WAEC and NECO, and the students of such school came from low socio economic status parents.

During one of the researcher's teaching practice exercise in one of the secondary schools at Onitsha, most excuses given by some students that came very late was that they have to go to their parent's shop, if not to open and tidy up the place, then it would be to sell thing before coming to school. Other factors influencing the academic performance of students includes resilience of students, school climate/environment, parent's occupations, parent's income and so on. The success or failure of students are summed up in these factors and that is what prompted the researcher to investigate if any relationship actually exists between high socioeconomic status of parents and high academic performance and also low socioeconomic status of students and low academic performance of students.

Relationships between the two variables mentioned above and student's academic performance in Anambra State secondary schools have not been exclusively established in literature. This is unfortunate because unless there is sufficient information on the relationship between socioeconomic status of parents and student's academic performance, parents and governments may not understand and may not be guided in knowing the ways of helping students from low socioeconomic status background to attain high academic performance.

It's against this background of low socioeconomic status of parents and poor student's academic performance, and the inadequacy of research in the area of high / middle socioeconomic status of parents and student's academic performance that this study was deemed necessary.

### **Purpose of the Study**

The main purpose of the study was to determine the relationship between socioeconomic status of parents and student's academic achievement in Secondary Schools. Specifically, the study intends to:

1. Determine the relationship between high socio economic status of parents and student's academic achievement.



2. To find the level of academic achievement of students whose parents are in middle socioeconomic status?
3. Ascertain whether students from low socioeconomic status actually perform below expectation in their academic achievements.

### **Research Questions.**

The following research questions are formulated to guide the study;

- 1 What is the relationship between high socioeconomic status of parents and students academic achievement?
- 2 What level of academic achievement do students, whose Parents are in middle socioeconomic status, have?
- 3 How does low socio-economic status of parents affect their children's academic achievements in secondary schools

### **Hypotheses.**

The following hypotheses are tested at 0.05 level of significance to guide the study;

- 1 There is no significant relationship between high socioeconomic status of parents and academic achievement of students.
- 2 There is no significant relationship between the academic achievement of students from middle socioeconomic status and their academic achievement.
- 3 There is no significant relationship between low socio-economic status of parents and academic achievements of their children.

### **Method**

This study employed a correlation research design in which the subjects were observed in their natural settings, and data were collected through the use of questionnaire. The study was carried out in Onitsha North LGA of Anambra State. The population of the study is comprised of 2,452, junior secondary three (J.S. III) students, while 100 students were selected as the sample size, using simple random sampling technique, from five selected schools out of the eleven secondary schools in the area. 20 students were selected from each of the five schools making a total of 100 students that were used for the study.

Instruments for data collection were a questionnaire and a documented result of the students. The questionnaire was designed on the four point likert type scale measurement of: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). Meanwhile the documented results were correlated with the student's response in the questionnaire.

The questionnaire which was validated by 3 experts was subjected to reliability testing using spearman's formula, in which 0.82 was obtained as the reliability index (very high). The researchers personally distributed and

collected the questionnaire. 100% distributed and collection was obtained due to the fact that lost or wrongly filled questionnaire were replaced and re-filled by the respondent concerned. Data collected were analyzed using Pearson product moment (mean scores) to answer the two research questions, while t-test was used to answer the null hypothesis at 0.05 level of significance. In analyzing the students' scores, the following quantitative values of "A" distinction, "C" for credit, "P" pass, and "F" for fail, were assigned for the purpose of analysis as follows. A = 4 points, C = 3 points, P = 2 points, F = 1 point.

Then the scores for items in the questionnaires were collated and compared with the scores of students in their annual examinations using the Pearson product moment correlation analysis. From the figures obtained, the direction and the strength of the correlation between the two variables were observed.

## Result

This chapter deals with the analysis and interpretation of the data collected for the study. The research questions were taken one after the other and summary of the major findings of the study is also presented at the end of this chapter.

### Research Questions one

To what extent does a relationship exist between students of high socio-economic status parents and their academic achievements?

**Table 1:** Computation of Pearson "r" for the relationship between students of high socioeconomic status parents and their academic achievements.

No of students	$\Sigma x$ scores on Questionnaires	$\Sigma y$ Result of students	$\Sigma xy$	$\Sigma x^2$	$\Sigma y^2$	"r"
29	98.5	78.3	273.965	376.5	213.1585	0.94

In table 1, the "r" value is 0.94. This value is high positive because; it's close to + 1 than -1. The conclusion therefore, is that there is a high positive relationship between students of high socioeconomic status parents and their academic achievements.

### Research Questions Two

What level of academic achievements do students whose parents are in middle socio-economic status, have?

**Table 2:** Computation of Pearson "r" for the level of academic achievements of students with middle socioeconomic status parents.

No of Students	$\Sigma x$ Scores on Questionnaires	$\Sigma y$ Results of students	$\Sigma xy$	$\Sigma x^2$	$\Sigma y^2$	'r'
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32	89	83.11	230.19	271.5	219.0151	-0.09
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In table 2, the “r” value is -0.09. This value is high negative because; it’s close to -1 than +1. The conclusion therefore, is that there is a high negative relationship between the middle socioeconomic status of parents and academic achievements of students.

**Research Questions Three**

What is the relationship between low socioeconomic status of parents and academic achievements of their children?

**Table 3:** Computation of Pearson “r” for the relationship between low socioeconomic status of parents and their children’s academic achievements.

No of Students	Σx Scores on Questionnaires	Σy Results of students	Σxy	Σx <sup>2</sup>	Σy <sup>2</sup>	“r”
32	86	100.31	241.36	238.5	293.9029	0.5

In table 3, the “r” value is 0.5. This value is moderate and positive because it falls between +0 and +1. The conclusion therefore, is that there is a moderate positive relationship between low socio-economic status of parents and academic achievements of their children

**Null Hypotheses.**

**Ho<sub>1</sub>** = There is no significant relationship between high socioeconomic status of parents and academic achievements of students.

**Table 4:** t-test for the significance of difference of the degree of relationship between high socio-economic status parents and students academic achievement.

Respondents	N	“r”	D f.	t-Cal	t-critical	Level of significance	Decision
High socioeconomic status	29	0.94	27	19.94	2.05	.05	Rejects null hypotheses

As shown in table 4, the t – calculated value of 19.94 is greater than the critical value of 2.05, given degrees of freedom 27 and .05 significant level. This leads to the rejection of the null hypothesis that states that there is significant relationship between high socio-economic status of parents and student’s academic achievement. Therefore, high socioeconomic status of parents is significantly associated with the student’s academic achievements.

**Ho<sub>2</sub>** = There is no significant relationship between middle socioeconomic status of parents and academic achievements of students.

**Table 5:** t-test for the significance of degree of relationship between middle socioeconomic status of parents and academic achievements of students.

Respondents	N	“r”	d	t-cal	t-critical	Level of significance	Decision
Middle socioeconomic status	32	0.09	30	0.16	2.04	0.5	Accepts null hypotheses

As presented in table 5, with 30 degrees of freedom and .05 significance level, the t – calculated value of 0.16, is less than the critical value of 2.04. This leads to the acceptance of the null hypotheses, which states that there is no significant relationship between middle socioeconomic status parents and academic achievements of students.

**H<sub>03</sub>** = There is no significant relationship between low socioeconomic status of parents and academic achievements of students.

**Table 6:** t-test for the significance of difference of degree of relationship between low socio-economic status of parents and academic achievements of students.

Respondents	N	“r”	d	t-cal	t-Critical	Level of Significance	Decision
Low socioeconomic status	39	0.57	37	3.52	2.04	.05	Rejects null hypotheses

As presented in table 6, with 37 degrees of freedom and 0.5 significance level, the t–calculated value is 3.52. This value is greater than the critical value of 2.04, this leads to the rejection of the null hypotheses which states that there is no significant relationship between low socioeconomic status of parents and academic achievements of students.

The conclusion is that, there is a moderate or average and positive correlation between low socioeconomic status of parents and academic achievement of students.

### Summary of Major Findings.

The following findings emerged from the analysis

1. High socioeconomic status of parents is highly and positively correlated to student’s academic achievements indicating that it could be used to explain student’s academic achievements in school.
2. Middle socioeconomic status of parents is negatively correlated with student’s academic achievements. In addition, the null hypothesis two showed that this correlation is not significant, this indicates that it could be related student’s academic achievement but in only less than -0.09 percent of most cases.
3. There was a moderate and positive correlation between low socioeconomic status of parents and student’s academic achievements. In addition, this correlation is significant. It indicates that low socio-economic

status of parents can be moderately related to the academic achievements of students.

4. It was also revealed from the t-test analysis of the relationship between high socio-economic status of parents and student's academic achievements, that there is a significant relationship, hence, the hypotheses was rejected.

5. From the t-test analysis of the relationship between middle socio-economic status of parents and student's academic achievement, there was no significant relationship between them; hence, the hypothesis was accepted.

6. It was also revealed from the t-test analysis of the relationship between low socioeconomic status of parents and academic achievements of students, that there is a significant relationship between them, hence the hypothesis was rejected.

### **Discussions of the Results**

For research question one, the findings were that, there was a high positive relationship between high socioeconomic status of parents and academic achievements of students. In addition, null hypotheses one, showed that high socioeconomic status of parents is significantly related with the student's academic performance.

What this means is that high socioeconomic status of parents have a tendency to marginally spur an increase in student's academic performance. Parents of high socioeconomic status provide everything for their children. Ezewu et al (1983) says that parents of high socio economic status put their children in the best schools in the society with facilities and staffed with well qualified teachers which enhances reading and learning.

He also observed that a child's economic position and educational level are partly determined by those of his parents and socioeconomic status. Generally, high socioeconomic status parents, have enough funds to cater for the needs of their children. They are likely to encourage their children more, because of their socioeconomic status.

In research questions 2, middle socioeconomic status of parents has a low and negative relationship with academic performance of students. In addition, the null hypotheses states that it's only in 0.09% of cases that middle socioeconomic status are associated with student's academic performance.

The middle socioeconomic status parents are termed the "selective consumer" of education in contrast to "the good consumer" attributed to high socioeconomic status and those that consumes education sparingly as in the low socioeconomic status. They are selective in the sense that they don't have over surplus and as such, education given to their children depends upon the value and importance, the getting along or getting ahead.

Another major finding which needs to be discussed in line with the study of water (1999) is the discovery of a moderate and positive relationship between low socio-economic status of parent and academic performance of students in research questions 3. In the null hypotheses, this relationship is significant.

In most cases, low socioeconomic status could be used to explain student's poor academic performance in schools. The reason for this finding is obvious. Students from low socio-economic status parents faces dots of obstacles in order to get quality education, they lack the funds to pay school fees, which must be paid or else they will be sent packing, which according to Donesy and Okadiran (2002) made some to engage in street hawking, sex networking behavior, juvenile delinquent behavior that takes much of the student's time which necessitated the poor academic performance and drop out syndrome noticed among students. They lamented that maternal and paternal deprivation of the essential needs of the young students have prompted their poor performances in public examinations such as J.S.S.C.E, WAEC and N.E.C.O.

The result of first null hypotheses shows that high socioeconomic status of parents is significantly related with the students' academic performance. The results of second hypotheses also shows that middle socioeconomic status are not significantly related with students' academic performance as the calculated value is 0.16 is less than the critical value 2.04.

The third hypotheses also show that middle socioeconomic status of parents are significantly related with the students' academic performance as the calculated value, 3.52 is greater than the t-critical, 2.04

### **Conclusion.**

Based on the findings the following conclusions were made, that the students from high parental socioeconomic class perform better academically than their counterparts in low socioeconomic background. Students from middle socioeconomic background also receive these conditions that enhance learning, but other factors must have propelled their success in their academic.

Students, from low socioeconomic status perform lesser in comparison to their counterparts in other socioeconomic status, but resiliency on the part of some students from this class improves their opportunities to achieve success in their academics.

## Recommendations

The major recommendation to this study is that Government should take the children from low socio-economic status into consideration and provide proper maintenance of infrastructures, also school facilities should be provided were necessary. Government should try to implement the Universal Basic Education (U.B.E.) not just to be in theory. Implementation of U.B.E, which specified that primary Education, shall be tuition free, Universal and compulsory will go a long way in helping the children from low socio-economic status to have access to basic education.

## References:

- Babcock. F. and Lloyd. N. (2002.) Inter-generational bonding in school: The behavioural and contextual=1 correlates of students-teacher relationship. *Sociology of Education*, 77 (1), 60-81.
- Becker, G. S & Tomes.N. (1979) An Equilibrium theory of the distribution of income and intergenerational mobility: *Journal of Political Economy*, 87, 1153-1189.
- Donesy, A. and Okadiran, G.J. (2002). Differential school effect among low, middle, and high social class composition schools. 19,21-49.
- Drummond, K.V, & Stipek.D (2004) Low Income parent's beliefs about their role in children's Academic learning. *The elementary school journal*, Vol. 104, No 3, 197 – 213.
- Ezewu.E. (1981) Sociology of Education London, lorymanns Ltd.
- Ford M. and Harrison.F. (1997) Untangling the links among athletic involvement gender, and adolescent academic outcomes, *sociology of sports*, 22 (2). 178-193.
- Nyirongo L. (1989) School size and the interpersonal side of Education: An Examination of Race / Ethnicity and organization content. *Social science quarterly*, 85 (5), 1259-1274.
- Shuttle.D. (2004) measuring peer pressure, popularity and conformity in adolescent and girls predicting school performances, sexual attitudes and substance abuse; *journal of youth and adolescence* 29 (2) 163.
- Smith, A, Schneider, B.H, & Ruck, M, D. (2005). Thinking about making it; Black Canadian student's academic achievements. *Journal of youths and Adolescence*, vol 34,347-359
- Steinberg, I, Dornbusch, S, M & Brown, B, B. (1992). Ethnic differences in Adolescent achievement: An ecological perspective. *American psychology*. vol 47,723-729
- Water, R.W. (1991) Dropping out of middle school: a multilevel analysis of students and schools. *American Educational research Journal*, 32,583-626

## DIFFERENCES IN MOTOR SKILLS BETWEEN PRESCHOOL BOYS AND GIRLS

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**Abstract:** *The study was conducted on a sample of 50 boys and 44 girls aged 6 and 7 from Novi Sad. Seven motor skills tests were conducted. Multivariate (MANOVA) analysis of variance has revealed statistically significant differences in motor abilities between boys and girls ( $F=2.60$ ;  $P=0.02$ ). Separate analysis has concluded that those differences exist in the motor-ability factor for the assessment of the whole body coordination – Polygon backwards ( $p=0.02$ ) and the lower-limb explosive power evaluation – A 20 m sprint test from a starting position ( $p=0.04$ ) in favor of boys in both cases, as well as the the factor for the functional synergy and the regulation of muscle tone manifested through the variable Wide-angle seated forward bend ( $p=0.04$ ) in favor of girls.*

**Key words:** *motor skills; preschool children; difference;, sexual dimorphism;*

### Introduction

The problem of assessing the motor skills is especially evident in preschool age. The motor skills at this age are not yet differentiated, and there is often a question of the validity and usefulness of some tests for the assessment of certain (hypothetical) dimensions of motoric status. Another problem is in the protocol of measurement of the motor abilities. The measurement of the motor abilities regularly includes maximum involvement of the respondents. At this age, it is virtually impossible to reach it as children are not aware of the need to achieve maximum energy engagement, which is the basis for the precise determination of the state in certain motor abilities (Clark et al., 2016).

The motor abilities in the preschool age are not yet fully defined; this period is very important in their development especially the development of the basic (general) motor abilities. When mastering motor movement tasks



that seek to assess a child's motors, what is manifested is exactly the general effect of different abilities and skills of the child. Practically, it seems that children with their overall motor knowledge make the realization of the motor movement tasks. Therefore, many experiences further confirm that physical exercise between the ages of four and seven should be based on creating the best possible basis; that is a practical preparation of the best possible basis for the future development of specific motor abilities.

Difficulties in proper determining of motor skills status of a child in this period are those when the motor tests are executed, individual motor abilities do not show isolated as in adults, so it is very difficult to determine which function those motor abilities serve. Using various motor tests in different age groups different motor abilities are estimated. For example: *High jump* test in adults estimates explosive power, while testing children is considered to be a coordination assessment. Another example of this can be found in the *Hand tapping* test, which assesses the frequency of alternative hand movements in adults. It seems that this motor test conducted with children can assess their ability to coordinate (Matic, 2008).

The mechanism for movement structuring can also be called the general factor of coordination. This, among other things, depends on how fast a person can form his/her own motor programs, i.e. how fast he/she can adopt new movement structures.

According to Bala (1981) who was examining the structure of motor skills in children aged 6-10, the existence of hypothetical motor dimensions was not confirmed. Based on the research results the author concludes that it can, at least hypothetically, be stated that the motor ability in the examined children is general in nature and that it can be understood as the "motor intelligence." Considering the obtained results, it is pointed out that the development of general motor abilities in children should be toward more comprehensive development of a general motor ability, and the use of specific motor activities by the age of 12 can only be seen as part of the development of the general motor ability at a higher level.

Motor abilities are demonstrated in such a way that one ability compensates for another, so that a child manifests his/her complex motor ability in a variety of situations and tasks (Nićin, 2000). Similar results were obtained by Turek (2000) based on a research with children aged 7-10 of Slovak population using the Eurofit test battery. The author concludes that the period of early school age is characterized by significant variability and the motors which are still not defined.

Using the transverse measurements Pavlovic (1984) monitored the condition of the physical abilities of the population of Vojvodina. The research focused on monitoring the annual increment in the results achieved in individual motor abilities. The highest annual increment in the early

school age children was found in the following tests: *Long jump* (for girls), and *Three ball slalom drill* (boys and girls). Comparing with the research that was conducted by the same author in the 1980s, the decline was noted in physical abilities. Therefore, based on these indicators and the impacts of today's lifestyle of young people (sitting more with less physical movement, increased levels of hypokinesia and sedentary lifestyle), it can only be assumed how much the motor abilities of children have decreased by now compared with that period.

The research on a representative sample of young people (10,713 boys and 10,979 girls) conducted by Moravec and Sedlacek (1990), in which they observed the differences in the dynamics of the development of certain motor abilities showed that there are some differences in the pace of the development of certain motor abilities. The authors point out that the age of 7-8 is a period very suitable for the development of motor abilities, whereas the age of 8-9 is a period for the endurance development. In early school age boys, it is recommended to work on the development of coordination.

The problem of the research was related to the analysis of the quantitative characteristics of motor abilities of boys and girls of preschool age. The primary objective of this research was to determine whether there were statistically significant differences in motor abilities between boys and girls of the preschool age 6 - 7 from Belgrade.

## Method

For the purpose of this research the experiment method that was used was transversal, which means that there was only one measurement conducted on the whole sample of preschool children.

The sample of subjects for the research was derived from a population of preschool children from Belgrade. Measurement of the motor abilities was performed on a sample of 94 subjects, divided into two subgroups, as follows: 50 boys and 44 girls aged 6 - 7 from Belgrade. All subjects at the time of measurement of motor abilities attended a preschool institution in Belgrade.

For the assessment of the motor abilities in preschool children standardized motor tests, based on the model of Bala, Stojanovic, & Stojanovic (2007), were used and the following battery of tests was applied:

I For the assessment of the factors of structuring of movement:

- 1) *Polygon backwards (0.1 s)*,
- 2) *Standing long jump (cm)*,
- 3) *20 m run from a standing start (0.1 s)*,

II For the assessment of the functional synergy factors and the regulation of muscle tone:

- 4) *Hand tapping (freq.)*,

5) *Wide-angled seated forward bend (cm)*,

III For the assessment of the duration factor of motor unit excitability:

6) *Body lifting in 60 s (freq.)*,

7) *Endurance in pull-ups (0.1 s)*.

## Results and Discussion

In accordance with the applied methodology of kinesiology research first the basic descriptive statistics of the motor variables were identified, together with the values of skewness and kurtosis. The results are presented for boys and girls separately.

Table 1. DESCRIPTIVE STATISTICS OF MOTOR VARIABLES

Variable	Group	AM	S	MIN	MAX	Sk	Kurt
Polygon backwards (0,1 s)	Boys	179.94	49.38	103	318	0.85	0.61
	Girls	210.02	75.54	115	522	1.79	5.53
Standing long jump (cm)	Boys	128.06	17.88	85	175	0.17	0.66
	Girls	126.55	23.40	75	170	0.05	-0.87
20 m run from a standing start (0,1 s)	Boys	48.18	4.61	39	58	0.29	-0.61
	Girls	50.36	5.73	39	66	0.63	0.49
Hand tapping (freq.)	Boys	18.30	3.87	10	29	0.13	0.18
	Girls	18.34	3.95	4	26	-1.07	2.98
Wide-angled seated forward bend (cm)	Boys	41.30	5.19	30	53	0.08	0.27
	Girls	43.48	5.04	31	53	-0.20	0.07
Body lifting in 60 s (freq.)	Boys	19.84	8.66	0	38	-0.03	-0.56
	Girls	22.27	9.43	0	42	-0.46	0.32
Endurance in pull-ups (0,1 s)	Boys	159.18	153.17	0	770	1.98	4.62
	Girls	158.80	100.88	0	470	0.93	1.47

*Legend: AM - arithmetic mean, S - standard deviation, MIN - minimum measurement result recorded, MAX - maximum measurement result recorded; Sk - skewness (inclination of distribution of results); Kurt - kurtosis (elongation distribution of the results).*

Taking into account the values of the descriptive statistics for the motor variables in Table 1 it can be stated that the boys were homogeneous in the variable *Endurance in pull-ups*, while the girls were homogeneous in the variables for the assessment of coordination *Polygon backwards* and the variable for assessment of the frequency of alternative hand movements, *Hand tapping*. In other motor variables heterogeneity of the groups was expressed that is conditioned by different levels of the motor abilities and social conditions of the environments in which the children live.

The extremely positive asymmetric distribution of the results of the variable for the assessment of the static strength of arms and shoulders in

boys and *Polygon backwards* variable in girls, indicates that most of the results are in the low-value area. This fact was contributed to by the lower arm muscle strength, a uniform level of the muscle strength of arms and shoulders in this development period in boys, and a distinct and uniform level of coordination in girls in this sample of preschool children.

In the variable for assessing the factors of functional synergy and tone regulation, which is manifested through the *Hand tapping* variable, it is observed that most of the girls' results were in the zone of higher-value area. The uniform level of the muscle strength of arms and the velocity of movement responsible for this motion of the body parts in space caused the appearance of homogeneity of the results in the aforementioned motor variable.

Table 2. KOLMOGOROV-SMIRNOV TEST FOR MOTOR VARIABLES AMONG SUBJECTS OF DIFFERENT SEXES

Variable	Group	K-S	p	MEA
Polygon backwards	Boys	0.96	0.32	0.136
	Girls	0.79	0.57	0.118
Standing long jump	Dečaci	0.87	0.43	0.124
	Boys	0.88	0.42	0.133
20 m run from a standing start	Girls	1.00	0.27	0.142
	Boys	0.91	0.38	0.138
Hand tapping	Girls	0.63	0.82	0.089
	Boys	1.04	0.23	0.157
Forward bend in sitting with stretched legs	Girls	0.79	0.56	0.112
	Boys	0.63	0.82	0.095
Body lifting in 60 s	Girls	0.72	0.68	0.101
	Boys	0.87	0.43	0.132
Endurance in pull-ups	Girls	1.52	0.02	0.215
	Boys	0.85	0.46	0.129

*Legend: KS - Kilmogorov - Smirnov Z coefficient, p - level of statistical significance of the Kolmogorov - Smirnov Z coefficient; MEA - maximum extreme difference between the obtained and the expected distribution.*

Testing of the normal distribution of the motor variables for boys and girls of preschool age shown in Table 2 indicates that there are no statistically significant deviations of the obtained distribution of the motor variables from the normal (theoretical) distribution ( $p > 0.01$ ). Maximum extreme differences between the tested and the expected distributions were not greater than 0.21 z-scores.

Table 3. DIFFERENCES BETWEEN THE SUBJECTS OF DIFFERENT SEXES IN  
MOTOR VARIABLES

Sex	Variable	F	p	F	P
	Polygon backwards	5.34	<b>0.02</b>		
	Standing long jump	0.13	0.72		
Boys	20 m run from a standing start	4.18	<b>0.04</b>	2.60	<b>0.02</b>
Girls	Hand tapping	0.01	0.96		
	Wide-angled seated forward bend	4.23	<b>0.04</b>		
	Body lifting in 60 s	1.70	0.20		
	Endurance in pull-ups	0.01	0.99		

Legend: f - univariate f test, p - level of statistical significance of f test, F - multivariate Wilks F test, P - statistical significance of multivariate F test.

By inspecting the values of the multivariate Wilks F test, it can be concluded that there is a statistically significant difference ( $P = 0.00$ ) between the subjects of different sexes in terms of their motor skills at the value of  $F = 2.60$  in the given sample. With the separate analysis of each motor variable tested, it is concluded that these differences are present in the following variables: *Polygon backwards* ( $p = 0.02$ ), *20 m run from a standing start* ( $p = 0.04$ ), in favor of boys, and the variable of *Wide-angled seated forward bend* ( $p = 0.04$ ) in favor of girls.

Better values of the hypothetical motor factors for coordination manifested through the variable of *Polygon backwards* in favor of boys can be linked to their current interests during the preschool age. Boys are more active than girls, and with their daily activities they "explore" and "learn about" the things and the world around them (Pavlović, Marinković i Bojović, 2014). With such an approach, their motor abilities are raised to a higher level, best manifested through the coordination of movement and coordination of the entire body as was the case in this research. The boys' coordination was at a higher level than the girls' who were of the same age. This is a direct consequence of the boys' activities, which could be manifested onto the presence of statistically significant differences in the variable of *20 m run from a standing start* in their favor.

As children get older, the growth influences the cortex on the subcortical structures of the brain, and the movement control is greater as well as the behavior sensefulness. A child's motor behavior will be easier to improve, he/she will more easily build new movements and exercises if he/she is more active, i.e. under the influence of controlled and systematically guided kinesiology treatment. Due to such knowledge and the fact that the efferent part of the nervous system has not been fully developed

in children of preschool age, it is necessary to start physical training in time, so that children can be as healthy as possible and can develop properly, and should not, in their motor development, fall behind other children who are included in the kinesiology treatment.

If we add these findings to the research of Bala, Djordjic, Popovic, & Sabo (2006), which states that the test for the explosive leg power assessment - *Standing long jump* in preschool children is more a coordination assessment test rather than explosive power test, since children need to connect more motor actions in one unit, so that the result would be better, the result is perhaps logical. The coordination in preschool age children, in addition to physiologic maturation of the body, depends on the activities of the child, on working with him/her in the field of motor abilities as well as on environmental factors.

To this fact we can also add the indicator that the afferent part of the nervous system, which carries impulses from the periphery to the CNS, matures between the age of 6-7 both in boys and girls. The afferent part of the nervous system which carries impulses from the CNS to the periphery, organs, tissues and muscles, finally matures at the age of 23-25. Due to the structural - functional maturation of the cortex and taking over a dominant role in the cortico-subcortical interaction, it is especially important for the motor development of a child, his/her behaviour and response in newly emergent situations (coordination of a child). Therefore, it is necessary to include children in physical exercise as early as possible and enrich their motors, as later in life children cannot compensate for how much they lost in preschool age. This research confirmed that the boys had significantly better results than the girls of the same age in the motor coordination assessment tests and sprint test.

The mere fact that girls have differently placed pelvis, that is wider due to a biological need for childbirth (pubic symphyses), was reflected in the better results of the girls in the hypothetical motor factor for the flexibility which was tested through the variable *Wide-angled seated forward bend*. The smaller angle of the femoral head in the acetabulum fossa in girls allows for greater muscles stretching on the back of the thigh resulting in a greater range of motions in the hip joint. Greater stretching of the muscles gives better results in this flexibility assessment test. Based on the results we may conclude that the differences arise in favour of the girls due to different femoral attachment to the pelvic cup, as well as different pelvic width in girls compared with boys of the same age.

## Conclusion

This research confirms the presence of statistically significant differences according to the sex of the subjects in the area of motor abilities. With the separate analysis of each motor variable tested, it is concluded that these differences are present in the following variables: *Polygon backwards*, *20 m run from a standing start*, in favour of boys and *Wide-angled seated forward bend* in favour of girls.

Generally, it can be concluded that the boys had significantly better coordination (estimated with the tests *Polygon backwards* and *20 m run from a standing start*). It may be surprising that the last two variables are used to assess the coordination of children, rather than running speed and explosive leg power, as it is the case with adults. Because of the undifferentiated primary motor abilities in children of the analysed age, these variables behave better as indicators for the coordination assessment, since suitable motor tests primarily require coordinated execution of necessary movements and motion, which belongs to the domain of the information component of the motor abilities in children, and only after successfully overcoming the overall structure of the task, the size of the energy component which a child should in both cases manifest with maximal excitation of the motor units can be detected.

If the previous results are analysed from the aspect of neurophysiological mechanisms defined in the research with older children and adolescents (eg. Kurelić et al., 1975), and even better in the elderly (eg. Gredelj et al., 1975), it can be concluded that the boys have a better expressed functioning of the movement structure mechanism, which is manifested through motor abilities: body coordination (*Standing long jump and 20 m run*), the reorganization of the stereotyped movements (*Polygon backwards*), and the mechanism for the regulation of duration of excitation of the motor units (*Endurance in pull-ups*). There is a significantly better functioning of the mechanism for synergistic regulation and regulation of muscle tone in girls. The part that relates to the regulation of the tone (*Wide-angled seated forward bend*) is consistently and significantly more pronounced in girls due to a different constitution of the pelvis, femoral head, which is placed under a smaller angle to the acetabulum fossa, so the execution of the movement in the hip joint is easier.

## References

- Bala, G. (1981). *Struktura i razvoj morfoloških i motoričkih dimenzija dece SAP Vojvodine*. Novi Sad: Fakultet fizičke kulture.

- Bala, G. (2004). Kvantitativne razlike osnovnih antropometrijskih karakteristika i motoričkih sposobnosti dečaka i devojčica u predškolskom uzrastu. *Glasnik Antropološkog društva Jugoslavije*, 39, 219-227.
- Bala, G., Stojanović, M. i Stojanović, M. (2007). *Merenje i definisanje motoričkih sposobnosti dece*. Novi Sad: Fakultet sporta i fizičkog vaspitanja.
- Clark, C. A. C., Chevalier, N., Nelson, J. M., James, T. D., Garza, J. P., Choi, H. J., & Espy, K. A. (2016). Executive Control In Early Childhood. *Monographs Of The Society For Research In Child Development*, 81, (4), 17-34.
- Matić, R. (2008). *Relacije motoričkih sposobnosti, morfoloških i socio-ekonomskih karakteristika dece mlađeg školskog uzrasta*. Magistarski rad, Novi Sad: Fakultet sporta i fizičkog vaspitanja.
- Moravec, R., Sedlaček, J. (1990). Razlike u dinamici razvoja pojedinih motoričkih sposobnosti. *Fizička kultura*, 44-45 (4), 256-258.
- Ničin, Đ. (2000). *Antropomotorika-teorija*. Novi Sad: Fakultet fizičke kulture.
- Pavlović, Đ. (1984). *Fizička razvijenost i fizičke sposobnosti stavnovnika SAP Vojvodine stanje 1984. godine*. Novi Sad: Zavod za fizičku kulturu Vojvodine.
- Pavlović, S., Marinković, D. i Bojović, Ž. (2014). Efikasnost primene poligona na razvoj koordinacije u nastavi fizičkog vaspitanja. *Nastava i vaspitanje*, 2, 299-311.
- Popović, B. (2006). Trend razvoja antropometrijskih karakteristika dece uzrasta 4-11 godina. *Zbornik sažetaka 46 kongresa Antropološkog društva Jugoslavije*, 128, Banja Junaković - Apatin.
- Sabo, E. (2006). Razlike između dečaka i devojčica u antropometrijskim karakteristikama prilikom upisa u osnovnu školu. *Pedagoška stvarnost*, 1,(vol. 3-4), 3
- Turek, M. (2000). Parcijalna struktura motoričkog učinka dece od sedam do deset godina. Zbornik radova drugi i treći simpozijum sa međunarodnim učešćem. *Efekti različitih modela nastave fizičkog vaspitanja na psihosomatski status dece i omladine* (str. 56-59). Novi Sad: Fakultet fizičke kulture.



## RISK MANAGEMENT IN OUTDOOR LEARNING EXPERIENCES

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**Abstract:** *Outdoor education is a new type of education, and it is also used as a learning method. In this article, we would like to present, mainly the results of a brief research on the risks that are involved in outdoor education activities. Also we would like to show the opinions of teachers regarding this topic, and the main reasons they don't integrate outdoor learning in the daily activities of their classes. These results are the outcome of a research that was made in Arad County that involved a number of 120 teachers, from primary and preschool educational field, and some of them belonging to other educational areas, such as sociology, psychology and even different middle school subjects. The main instrument used was the questionnaire. Conclusions show a great interest of primary and preschool teachers regarding this topic and they show openness to find out more about how to offer quality education, even through outdoor learning activities.*

**Key words:** *risk, management; outdoor education; learning experiences; teachers opinion;*

### Introduction

Outdoor learning, in the last years, had become a topic of interest in all educational areas and teachers had been showing an increased interest in learning about it and mostly in implementing it to their classes, no matter the level or the age of pupils.

Among with this, also came many questions about the safety issues that might come up with this new kind of educational approach. Not only teachers, but mainly parents were concerned about the safety of their children during outdoor education activities, and about the risks that might appear, even if they knew that the kids were under permanent surveillance. Specialists from different educational fields tried and even now try to find different solutions to solve this issue that might interfere with the normal and healthy development of this process.

### **Theoretical foundation**

Firstly, we would like to present a few facts about what outdoor education is, what are its main objectives and mostly, what are the finalities, outcomes and competencies that can be earned. There have been so many definitions given to the concept that it is still difficult to relate to only one. Specialists from this domain, still can't stop to only one definition that can describe completely the whole concept. Still, outdoor education is about learning in a new, different, attractive way, in a faster, more efficient way possible, using as many resources as it is possible from the natural area.

Halfway through the century, the classic definition of outdoor education according to Donaldson, (Donaldson and Donaldson, 1958) was "education in, about and for the outside". If we want to describe outdoor education as a learning method, we can use these three keywords from the above definition. The word in, refers to the venue where our work takes place. The word about, referring to the subject or content of learning, which is learning about nature. The word for, refers to the purpose of outdoor education, that is, the future benefit of our planet's finite resources. Of course, this definition has been criticized in many ways. Some educators or teachers claim that some aspects of outdoor education can also take place inside. Others feel and argue that when we talk about outdoor education, we mean more than learning about nature. They argue that the personal and social environment are equally important pillars of outdoor learning. Some, starting from this definition, claim that it is more of an independent learning, free thinking and problem solving. Whatever the reaction to this definition, it has been a solid foundation for outdoor education for nearly three decades (Priest, 1986).

If we look at the definitions that emerged after 1980, it can be said that outdoor education is an experimental learning process of learning through practice, a face-to-face learning, care is primarily carried out outdoors by exposure to everything outside. In outdoor education, the content of learning is also based on relationships. These relationships can be analyzed from several points of view: from the point of view of people and from the point of view of natural resources. This definition is based on several major theoretical points:

- Method of Learning (Smith, 1955)
- Experimental process (Sharp, 1943)
- Except but not exclusively, learning basic concepts before a trip, preparing materials for an ecological study, looking at slides with images from nature, preparing logistics objects for an expedition, etc.
- Involvement of all senses: seeing, hearing, taste, smell, intuition and touch as well as the involvement of the three areas of learning: cognitive,

affective and motoric (Lewis, 1975), outdoor education calls for the use of senses for observation and perception

- The abstract approach of the disciplines is completely replaced by the sensory, the children will use their ears, eyes, nose and muscles externally, and will learn through this process (Mand, 1967). Science, skills and attitudes are requirements that will be developed in outdoor programs (Ford, 1980)

Outdoor education is based on the interdisciplinary study of the curriculum.

Hammerman, 1985, argues that outdoor education is “an approach in achieving curriculum goals and objectives.” However, it is not necessary for the curriculum to be based solely on school. It could also exist outside the school in the direction of excursions or choosing a different path, such as outdoor learning.

Outdoor education is therefore a perfect combination of adventure-based education and experience-based education. By exposure to natural environments, individuals can learn about their relationship with the natural environment, the relationship between certain ecosystem concepts, personal relationships, with others, but especially the relationship with oneself, a better understanding of the self. An association and a holistic approach to all these concepts is definitely the definition of outdoor education. From a historical point of view, there was much confusion associated with the numerous attempts to define outdoor learning because it could be applied in several ways (Hammerman, and Hammerman, 1985).

Conservatives perceive outdoor education as a conscious relationship with natural resources and their wise use, recreational leaders, on the other hand, argue that outdoor education should refer to its recreational goals in the external environment, environmentalists see it more like helping students to develop personal responsibility for a very fragile environment. Then the reactions of teachers and professors, specialists in education, which address the learning outdoors under the magnifying glass of the national curriculum and its generalities, its requirements and finalities, in the therapeutic, academic, environmental outreach to curricular requirements. Experts in education based on experiential education take more of the relationship of outdoor education as a benchmark.

According to some studies (Moldovan, 2007), closer examination of the whole concept requires an exact analysis of placement as a type of education or as a learning method. Some say that outdoor learning belongs to non-formal education, is organized or semi-organized outside the formal structures and routines of the educational system. Some of the main features of non-formal education could be that they maximize learning, minimize constraint on formal education, provide an immediate practical use of

learned knowledge, and contribute to the implementation of all children's interests and attitudes. The learning framework is easy, it uses methods such as active involvement and participation, it is oriented towards the participating actors, it is based on the participant's experience, and the authority is not imposed, but chosen by the group members. It stimulates the development of the inter-human relationship, promotes teamwork and especially can be structured as a type of interdisciplinary learning. It can therefore be said that all types of education have major contributions to the full development of the personality of those involved, neither of which can be neglected or ignored, but all three types of formal, informal and non-formal education must work together and complement each other.

### **Directions and causes of the problem**

Recent research highlights the great benefits of outdoor education, with all its components. For example, various outdoor activities can be combined with adventures or excursions, even with camping. The relationship between students engaged in outdoor learning activities and their teachers is improving, and as a result, many cultural links are suddenly available. Various health benefits have been observed, highlighted by many physicians, physical and mental benefits. During these activities, children develop managerial skills and competences, find positive models, and learn to develop leadership opportunities, search for individual methods of personal development and, especially from a social point of view, develop friendship relationships, connect with each other and learn from each other. Through these activities, there is great opportunity to learn responsibility and independence, to enhance inter and intra-personal skills, to be actively involved, to solve problems and to develop decision-making abilities. Still, there are so many questions on how to do it without having to face lots of risks.

In the contemporary vision of outdoor education and the analysis of its situation in current education systems, there are certain teacher responsibilities that need to be taken into account before engaging in outdoor learning. They include technical skills, safety, ecological skills, organization, training, facilitation, leadership, knowledge and ecological ethics. It is so important to consider all of this, since outdoor educators, mentors, teachers, and trainers are basic models for all children involved in these activities. Assessments that can be used by teachers to evaluate in a modern perspective all children involved in such activities are multiple. We will only attempt to list some of them as an idea for those who want to initiate outdoor learning but do not know how to make a correct assessment: research, group process, physical tests, group feedback, interaction, self- interdisciplinary tests, application essays, written tests, journaling, scenarios, etc. Also activities

that might be included or known as outdoor learning activities are of an enormous variety.

Contemporary policies and practices that are constantly concerned with outdoor education are experiencing a decline in fieldwork. Study of science outside the classroom is heading for extinction, according to a report published in 2003 by the British Council of Studies and the British Ecological Society. Barker argues that after countless studies among young people, he concluded that they are disappointed because their education does not include experiential areas. (Barker et al, 2002) There is concern among practitioners about existing policy, either that it is at national or school level does not take into account the needs of young people about opportunities to learn outside classrooms. This is because there is no curriculum developed at each discipline that encourages outdoor education in state schools. As with some of the subjects the activities take place outside the classroom, some content should be replaced or adapted to the external environment at each of the disciplines studied in schools.

### **Recent perspectives**

From the point of view of the contemporary approach, it can be said that public schools make great efforts to introduce in the curriculum dimensions of learning with strong student accents, and its involvement in decision-making and changing the school and community environment. There are clear links between the local community and outdoor learning, so the key steps of the concept of active citizenship include the requirement for students to use their imagination, to consider, besides their own experiences and the experiences of others, to think, express, explain and critically assess the opinions of others and, above all, develop and learn freely in a space as close to nature as possible to discovering and experimenting. It is precisely because of these factors that contemporary school is the mirroring of the school of the future, and schools centered in the future are of interest in content tailored to pupils' needs and curiosities, the introduction of new learning methods, and the increased potential of school spaces to turn into true outdoor learning sites classrooms of the future. Contemporary education must have as its main concern the search for new ways to create inspired buildings that can easily adapt to the educational and technological changes that emerge (DfES, 2003f, p. Iii). More and more indoor sports schools are also used outside sports classes; more and more outdoor areas of the school are refurbished and redesigned in the spirit of their use as an educational environment, and the yards of schools are the second most used space to run educational activities.

Most often, outdoor education is placed somewhere between the risk area and the challenge, and its exact place in education is not established. There are, on the one hand, adults and teachers who only calculate and consider the risky part of outdoor education, but most often they are too worried about any activity that educators have and for which they are responsible. In the literature, discussions and studies on the far too rigorous control of children are presented. For example, Cunningham argues that adults are too much involved in children's lives and this excessive involvement leads to imbalances in self-regulation of children's safety. Children need to be challenged at any age to develop physically, mentally and emotionally well. If they are always told what are the risks to which they can be subjected and who are not, they will lose their risk measurement competence at some point and thus lose their decision-making capacity. (Cunningham, 2006)

It is absurd to argue that children should be accustomed to situations of risk or common danger, but equally absurd is the attempt by adults to protect them from any risk or challenge that might arise in life's aspects because it would not do more than limit their freedom to experience. The role of adults in outdoor education in terms of exposure to risk is to help children dare to take risks to help them meet the challenges. Outdoor education through the programs it offers in the natural environment provides opportunities to risk and be successful. (Billton, 2010) Some adults believe that the indoor environment does not pose as much external risks but they do not take into account the fact that indoor environments do not have as many opportunities as the natural environment offers through the wealth of resources available to them. The fact that adults, parents and educators alike show their desire to overwhelm children leads us to a quote inspired by Louis Pasteur and brought to light by Guldberg: prolonged childhood cannot remain a magical realm but becomes hell. He also claimed to be inspired by children in two ways, kindness for what he represents, and respect for what could become. The children's endeavor prolongs their childhood, but not in the sense of keeping them in a magical realm that provides security but rather in the sense that they steal them from the independence of their becoming as adults. (Guldberg, 2009)

There will always be accidents and this is really creepy and hard to accept especially when it comes to education, but the most important thing is the way we respond and we relate to accidents. Fencing the freedom to educate or play outside can bring more problems than benefits. Inside, children can acquire a fake sense of freedom, and this can cause great damage in the future. According to Gill, an increasing number of educational experts believe that most materials and surfaces that use as resources in education lead to more broken arms than those used outside. (Gill, 2007)

Placing children in a glass bowl will not serve them as protection but rather stops them from taking part in exciting activities that would otherwise cause their greatest learning experiences and the most beautiful memories. In the literature, both positive and negative theories of risk have emerged, it is important to pass everything through our own filter and to decide accordingly how permissive we are in planning and organizing the learning activities in which we want to we involve the children. Through decisions we take, we can protect or expose the pupil to different situations in nature, but let us not forget that we can protect them from the most beautiful learning experiences and show them distrust and then follow badly in their adult life. A confident child will be a confident adult and society needs motivated individuals who believe in their own forces knowing their lower and upper limits very well.

Transforming an environment into a danger-free environment becomes challenging, and children will have fewer independent decision-making experiences, fewer opportunities to assess their own limits and fewer opportunities to gain confidence and self-esteem by coping independently. (Stephenson, 2003) From a physical point of view, the outdoor learning area must be safe for all participants, but it must also allow a certain level of risk and challenge. According to Bilton, security is about letting things go and not about closing the doors that can create opportunities. (Bilton, 2010 a)

In order for an external environment that is designed for learning to become safe for educational activities, the following aspects must be considered:

- awareness of hazards that may occur in the outdoor learning area
- elimination of possible hazards (poisonous plants, sharp hedges, sloping gates)
- making an external area assessment and check it regularly
- ensuring the possibility of finding challenging situations
- choosing the right clothing and footwear
- regular discussions with the participating student group on safety, risk and challenge
- developing safety policies and making them available to parents, managers and organizers
  - ensuring that the work area matches any activity
  - training the staff for vigilance throughout their activities
- ensuring that there are enough teachers involved in activities so that all learning areas are covered
- the negotiation of rules of conduct with students on the use of environment and resources as well as in behavior towards peers. (Bratton et al, 2005)

## **Research**

The latest debates on the risks that occur in outdoor education show that they affect student participation. Other factors influencing participation would be the lack of time or natural environments of the community. (Godbey, 2009) There will always be risks associated with bringing children out, from the most insignificant to some of great gravity. However, the chances of serious injury are as low as possible, in the sense that a child is more likely to suffer serious injuries than crossing a road than by taking part in outdoor activities. It is suggested to compare the minimum risks with two decisive factors:

- the risk of a sedentary and over-protected life
- the benefits of outdoor experiences (Gibson & Haynes, 2008)

If we rely on the above considerations, we realize that even the most pessimistic perspectives against the placement of educators in learning situations outdoors are dismantled. However, the number of students participating in outdoor activities has been decreasing since the 1990s. Governments in different countries are developing policies and manifests precisely to counteract these effects. Prior to any outdoor learning activity, it is mandatory to conduct a risk assessment by a qualified person. These evaluations should include information and facts about any disability, learning disability, or issues related to the behavior of all members of the group.

Children will fall and they will get bruises, because it is part of their learning process. (Ouvry, 2003) It is natural for parents to worry about their children when they play or learn outside, but exploring, solving problems, testing their own limits are the ways in which they develop and learn. It is equally normal for parents and teachers engaged in outdoor activities to make some remarks about how children should or should not do, but this suggests to children that we are doubting their abilities and thus undermining their efforts. Simply by being reminded that they will fall, they will become dirty or will not succeed, they will not be kept away from the possible dangers, they will have to see and experience the consequences of their inattention. By engaging in adventure and exploration, children can learn their upper and lower limits, both physically and mentally. There is a particular need, in a century when everything is given to us on the tray, to realize that, contrary to financial or social possibilities, we must give students the opportunity to try, test, give a chance, test their own ideas to see exactly what they can do to explore a wide range of outdoor activities. This may sometimes involve dirt, drops, hindrances, minor cuts, wrinkles or small



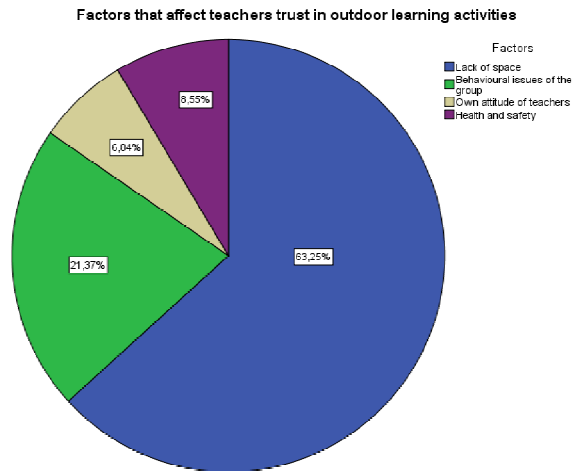
scratches. However, it seems that these activities are developing the individual in most aspects, providing the highest dose of trust.

Everyday life always involves a certain degree of risk, and children need to learn to cope with them from the earliest age. Each student must be able to take calculated risks, and for this each one must engage freely in adventurous and challenging activities. The opposite of this may be the failure of children to play or learn outside, always putting limits or forbidding it altogether. The effects of this decision are not delayed:

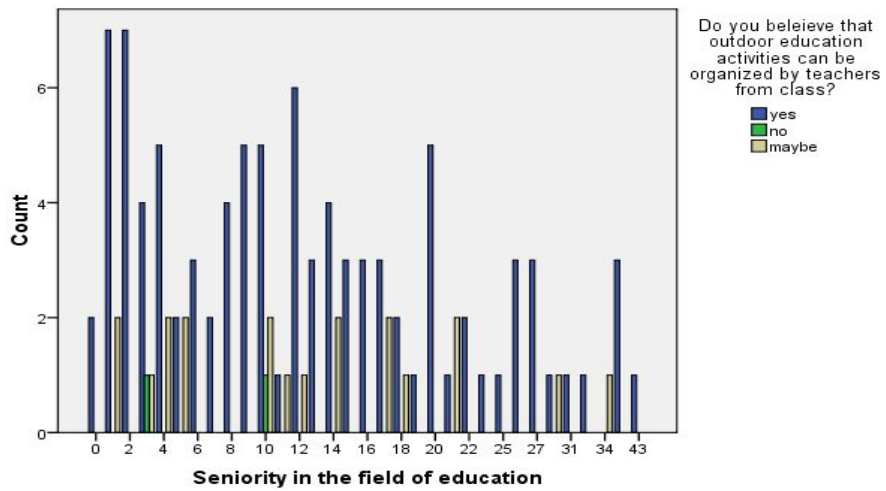
- sedentary
  - obesity
  - poor socialization and communication skills
  - low physical abilities (throwing, running, balance)
  - low self-confidence
  - low concentration ability
  - low ability to resolve problems or cope with life situations
- (Spencer, G. et al, 2016)

One of the best ways to teach students about risk is teaching them to cope with difficult situations by experimenting with risks in controlled situations. Elimination of all risks is never a variation, because life itself is not risk-free, so risk becomes part of education. Controlled media means that the students will always be under the supervision of qualified personnel in this respect, but also that the venue will be chosen with care, specific to the activity being pursued. It is also important for organizers and teachers to monitor whether students are responsible for the safety procedures and if they correctly and realistically assess the risks involved. Parents must accept that if their children take part in outdoor activities, there will always be a minor element of risk to them.

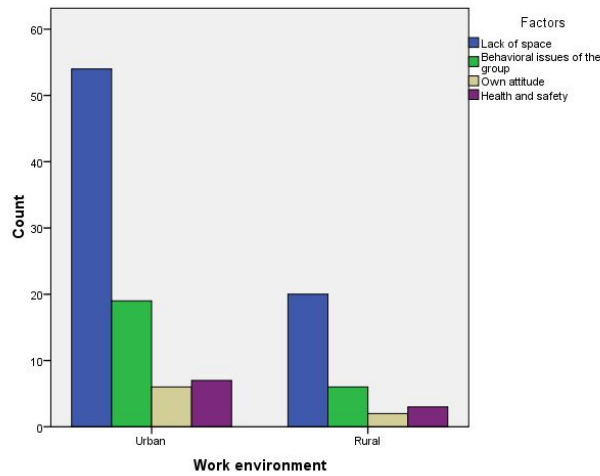
The research was made on a number of 114 teachers, mainly preschool and primary school teachers, and it shows the following:



**Image 1. Graphic measuring the trust of teachers in outdoor activities**



**Image 2. Chart on organization of activities by teachers from class in comparison with their seniority in the educational field**



**Image 3. The analysis of influencing factors in comparison with the working environment**

### Analysis of the results

The results show that the factors that mostly influence the lack of trust in outdoor experiences or the lack of activities at class in outdoor education learning experiences are the lack of space, health and safety, the negative attitude of teachers towards this topic and also the behavior of the class. The great majority of teachers, a number of 63, 25 % of those interweaved, consider the lack of space the biggest problem that stop them to engage in outdoor education activities. On the second place there are the behavioral issues of the group, meaning that these teachers don't trust the group in order to have the courage to go out with them and try to do something new. A number of 21, 37 % of teachers would like to engage into outdoor learning but they are afraid of the reactions of the class, mostly they are scared that they would lose control over them and the curricular content would not be accomplished as it usually is between the walls of a classroom. A number of 8, 55 % consider health and safety as a risk in outdoor education and its activities. These teachers think that children are more exposed to health and safety risks outside than in the classrooms. This is because during the traditional classes, children are not engaged in activities that require moving. It is more like a sitting position for hours and this gives teachers the fake sense of safety. Lastly, teachers say that their own attitude stops them from being active in the field of outdoor education. A negative attitude towards any concept, brings other negative attitudes in this way. For example, parents and students will react negatively towards outdoor learning if they observe that this topic is not important for the teacher. (Image 1.)

We have also observed that there is a great connection between the seniority in the educational field and the trust of teachers, that they are capable of organizing outdoor learning experiences with their classes, without the help of a professional in this direction. (Image 2.) The results show that surprisingly, those teachers who work in the educational field between 2 and 10 years are more opened to believe that they are capable to organize outdoor activities with their classes. Even thou there are teachers that have a bigger experience in the field of education, they think they are not able to organize outdoor experiences with their classes but consider that it would be necessary to exist a specialist that would do all these kind of learning activities with pupils.

Also there has been an analysis on the working field, and we have made a comparison between the influencing factors and the teachers that work in urban and rural areas. Those teachers who work in the city are most likely to say that the lack of space is an issue. The research show that the factors vary in the same intensity in both cases. (Image 3.)

### **Intervention**

After the research, we started to have a teachers training in order to present data about the importance of outdoor education, the risks involved and how they can eliminate risky situations during outdoor learning activities and to get the courage to start and engage in learning situation according to the curriculum but on the outside.

### **Conclusions**

Nowadays, risk has become a challenge for both parents and teachers. Children, on the one hand, are required to be miniature adults, and on the other hand they need constant protection. These two constants are cyclically repeated, so it is difficult to form themselves as independent and autonomous personalities. In one of her papers on the role of the adult in educating children, whether a parent or a teacher, Cunnigham points out that they are too much involved in the lives of children in an ultra-protective way. It is true that parents and teachers refuse to educate themselves in the spirit of autonomy and independence, from the desire to offer all that is possible to the children and to protect them from as many dangers as possible. The effects of these facts are visible both at home, in computer use, in the car, during travel, in post-school programs, even in breaks, and students feel the need to be permanently supervised by one or more adults. (Cunnigham, 2006) If children cannot self-regulate in their activities, they cannot find out what is safe and what is not. Cook argues that for a harmonious multilateral development, every child must be put in situations of learning about risk, about his or her own abilities and capabilities, to develop accurate and real

judicial mechanisms in supervised environments. (Cook & Heseltine, 1999) This does not mean that we are willing to put children in situations of danger or hazard and to participate as spectators without intervening when needed, but rather to differentiate between these concepts and those at risk and challenge. There are reports of extreme cases of environmental problems in which children have been injured during school activities, but these were due to a lack of information or knowledge about each person's personal boundaries and not to the use of the external environment.

In conclusion, we must allow each child to cope while we must show them that we have confidence in them and their capacity to live up to expectations. Trust you, you know a lot more than you think, that's Guldberg's words to every adult and child, suggesting that we need to trust instead of over-protecting and preventing what we cannot control. (Guldberg, 2009: 144)

### **References:**

- Barker, S., Slingsby, D., Tilling, S., (2002), Teaching Biology outside the Classroom: is it heading for Extinction? A Report on Biology Fieldwork in the 14-19 Curriculum (FSC Occasional Publication 72), Shrewsbury: Field Studies Council
- Bilton, H., (2010), Outdoor Learning in the Early Years: Management and innovation, (3rd. ed.), Routledge
- Bilton, H., (2010 a), Playing outside. Activities, Ideas and Inspiration for the Early Years, Routledge, New York
- Bratton, C., Crossey, U., Crosby, D., McKeown, W., (2005), Learning outdoors in the early years. A resource book, South Eastern education and library board, UK
- Cook, B., Heseltine, P. (1999), Assessing Risk on Children's Playgrounds (2nd edn)., Birmingham: RoSPA.
- Cunningham, H., (2006), The Invention of Childhood. London: BBC Book
- DfCSF (Department for Children, Schools and Families) (2008) (May revised) The Early Years Foundation Stage. Nottingham: DfCSF Publications
- Donaldson, G., Donaldson, L., E., (1958),” Outdoor Education: A Definition.” *Journal of Health, Physical Education and Recreation*, 29 (17):63
- Ford, P. M., (1981), Principles and Practice of Outdoor/Environmental Education, New York, NY: Wiley
- Gibson, S., Haynes, J., (ed.), (2008), Perspectives on Participation and Inclusion: Engaging Education: Continuum
- Gill, T., (2007), No Fear. Growing Up in a Risk Averse Society, London: Calouste Gulbenkian Foundation.

- Godbey, G., (2009), *Outdoor Recreation, Health, and Wellness. Understanding and Enhancing the Relationship, Resources for the Future*, RFF DP 09-21, Washinton
- Guldberg, H., (2009), *Reclaiming Childhood Freedom and Play in an Age of Fear*, London: Routledge
- Hammerman, D. R., Hammerman, W. M. and Hammerman, E. L., (1985), *Teaching in the Outdoors* (3rd ed.), Danville, IL: Interstate
- Lewis, C. A., Jr., (1975), *The Administration of Outdoor Education Programs*, ERIC
- Mand, C. L., (1967), *Outdoor Education*. New York, NY: Pratt Sharp, L 8.
- (1943), "Outside the Classroom", *The Educational Forum*. 7(4):363
- Smith, J. W., (1955)
- Moldovan, E., (2007), *Aspecte relevante psihosociale ale activităților de educație în aer liber în procesul educațional al tinerilor*, Conferința științifică națională, București
- Ouvry, M., (2003), *Exercising muscles and minds. Outdoor play and the early year's curriculum*, National children's bureau, London
- Priest, S., (1986), *Redefining outdoor education: A matter of many relationships*. *Journal of Environmental Education*, 17(3), 13-15
- Sharp, L. B., (1943), *Outside the classroom*, The Educational Forum, Taylor & Francis
- Smith, J. W., (1955), *Adventure in Outdoor Education*, *Journal of Health, Physical Education, Recreation*, Taylor & Francis
- Spencer, G., Bundy, A., Wyver, S., Villeneuve, M., Tranter, P., Beetham, K., Ragen, J., & Naughton, G. (2016), *Uncertainty in the school playground: shifting rationalities and teachers' sense-making in the management of 8 risks for children with disabilities*. *Health, Risk, & Society*, published online 5 October. <http://dx.doi.org/10.1080/13698575.2016.1238447>
- Stephenson, A., (2003), *Physical Risk-taking: Dangerous or endangered?* *Early Years*, Vol. 23, Iss. 1, 2003

## THE ACCURACY OF PEDAGOGICAL LANGUAGE AND OF THE PEDAGOGICAL APPROACH - AN IMPERATIVE REQUIREMENT OF EDUCATIONAL REFORM

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**Abstract:** *This paper comes to add a new contribution to the same set of reflections about curriculum and the curriculum reform implications in the real life. The starting point is rooted in a day to day seen reality which must become a genuine concern for all the responsible educational factors all over the world. The methodology of teaching, as an essential structural element of the learning situation, the core issue of curriculum concept, is the focus of the analysis this time. The selected ideas of the paper come from an in-depth and long-term observation of the educational practice of the author as a professor for future specialists in education and evaluator of teachers involved in the specific Romanian process of reaching the first degree in education. A number of dysfunctions and weaknesses of the educational practice are presented in the area of using the teaching methodology and some argued explanations are provided.*

**Key words:** *curriculum reform; educational reform; teaching methodology focused on learning;*

### **1. The current context of the reform (in the world and in our country)**

At a time of the generation that has created a glorious title in wearing knee-broken trousers, and broken to elbows clothes, the need to reform education all over the world is visible not only in schools and amphitheatres but also in every corner the street. The significance of the blunt pants or broken clothes because of a hard work was lost in the darkness of the specific attitude of this era in which "to pretend to do" has become a daily reality that takes on more and more ingenious forms. To the voluntarily destroyed clothes, the omnipresent phone that powerfully steals the eyes of the people wearing clothes in the travesty is added. It appears that in the street there is no longer

any eye to seeing the size of holes in pants, stockings or jackets. But it does not seem to matter. Important seems to be only to wear the fashionable holes and to keep the eyes fixed on the little screen. This is the reality of life nowadays.

An impressive number of official documents and statements highlight the concern about the education for the next generation and stress the intentions to offer genuine possibilities to ensure access to basic education for all. This is an essential part of the 2030 Agenda for Sustainable Development, for instance, which outlines how countries, working with UNESCO and global partners, can translate commitments into action.

A surface study or an in-depth analysis of what it is happening in the area of national educational systems show a wide range of measures aiming to develop the education process within the national boundaries according to concrete and specific possibilities. Theoretically, everything appears to be correct and with chances to reach the declared goals. Practically, the street and the day to day life show a consistent gap between intention and reality.

One of the reasons for existing this gap is what I can name as the "banner of pretending" which seems to become a poison of our time. The hungry for receiving points and for building fat personal portfolios, the excessive bureaucracy cover the concern of the teachers about what is really important in their work, the care for the effective educational act. The teachers training itself (both stages: pre-service and in-service) appear to be influenced by this superficiality. The direct reflection of all these is obviously seen through the results on students' competencies.

This paper comes to add a new contribution to the same set of reflections about curriculum and the curriculum reform implications in the real life. It focuses the attention on one of the five structural elements of the learning situation as the core issue of the curriculum: the teaching methodology. In the context, an analysis of how teachers choose and use this methodology, how they understand the place and the role of it within the curriculum context is to be scrutinized.

## **2. Teaching-learning methods a structural element of major importance of the learning situation**

A previous paper from this cycle has already shown the pyramid of the curriculum as a visual representation of the structure of a learning situation.



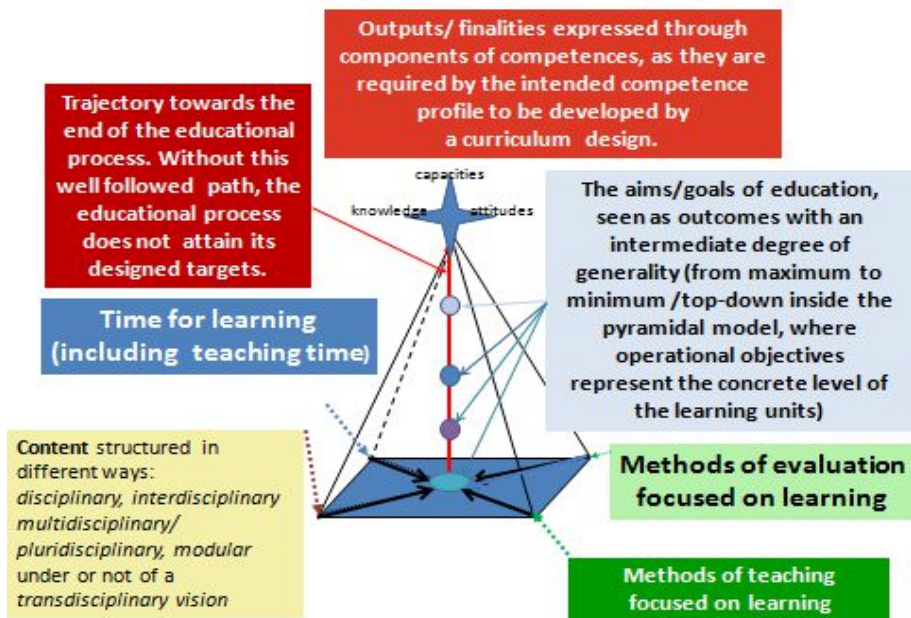


Fig. 1 Pyramidal model of the learning situation as core el issue of curriculum

This time the analysis starts with the methodology of teaching considered in a functional connection with the other elements of the learning situation structure and having as fundamentals, the available and appropriate means and tools for teaching. The fig. 2 shows these connections.

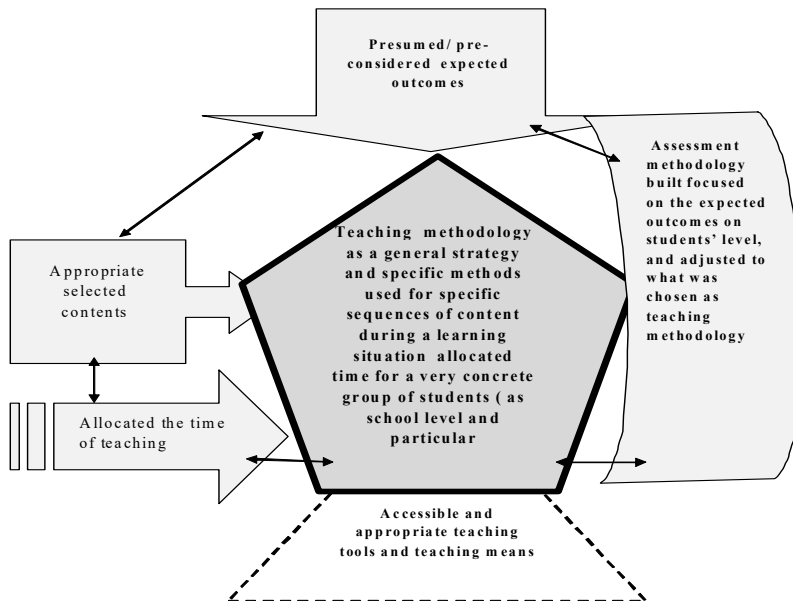


Fig. 2 Methodology of teaching within the context of the learning situation

### **2.1. Location and relations with other fundamental structural elements**

The fig. 2 highlights the determination of teaching methodology by the other structural elements of a learning situation. The *teaching methodology* is firstly determined by the *expected outcomes* that are the most important aspect to be reached because they will be the aspects taken into account by a *final assessment* of the students' achievements. The *contents* are selected from what the national curriculum recommends, but they have to be appropriate vehicles leading to the development of those students' competencies considered as expected outcomes. The delivery of these contents must be done by using an appropriate teaching methodology, chosen with a strong focus on the concrete students' learning, aiming to develop the expected competencies but, in the same time, according to the available and appropriate *teaching tools and means*. The *allocated time for teaching* focused on students' learning is another constraint to be taken into account.

### **2.2. Implicit relationships with other elements**

The available teaching tools and means are not a core element of the learning situation structure but they are important determinants of the selection when it is about the teaching methods. On the other side, the space of learning, the specificity of students –teacher relationship, the ethos of the school and the genuine support from the families and community are other important determinants for the selection of the teaching methodology. Behind all these, the vision and the quality of teachers training for using appropriate teaching methodology come to influence in a very interesting and strong way the quality of the educational process.

## **3. Incertitude, confusion versus apparent brilliance in addressing didactic teaching methods**

The reality of nowadays, attentively observed during my activity as professor and evaluator of teachers (within the specific Romanian context of obtaining the first degree in education), or during the professional visits abroad highlights several common aspects that appear as characteristics of the educational reality. The more one talks about the necessity of using modern didactic strategies and methods, the more the confusion seems to become prevalence.

The practice of education is abundant of complicated projects. Procedures for the pedagogical design that have become a kind of Procust' bed is the bases of this new fashion in designing the educational process. The little understood in their essence these procedures are, the more they are used in design documents with tenacity worthy of a better cause.

Firstly, they are strongly time-consuming; they became factors of a negative motivation for the essence of the educational work on one side, and stimulating factors to promote the form without substance. Thus, the "banner of to pretend" insinuates itself in this essential level of teaching activity.

Several other confusions and misunderstandings are to be highlighted.

*Methods of organizing learning are confused and merged with the teaching-learning methods*

Any learning situation implies generic student organization and successive reorganizations for each sequence the learning situation, depending on what is aimed at implementing each of the sequences

*Active methods are treated as synonymous with interactive ones.*

Activism is targeted at each student who, during the teaching process, must actively manifest not necessarily in the motor plan (as is misunderstood as behavioral activism at the level of movement), but especially in the cognitive plane. The pupil must be faced with aspects that he/she thinks about, bringing knowledge from his / her memory, decoding the new information, answering, even in internal language, questions raised by the teaching process. The active participation of the student is possible in the circumstances when the teaching really catches the attention; it leads him/her to participate with interest in what is happening in the class. And this strongly depends on the teaching methodology.

Sometimes, the tasks involved in the teaching process require collaboration between students, performing group/ team activities in order to give a response. The response could involve the cognitive and/ or sometimes the physical involvement of all members of the group, on well-defined task sequences for each of the students. *Only in this case can we talk about interactive methods.*

Tasks such as: "read and highlight... choose and put it in a hierarchy", addressed individually are aimed at student activism but not interactivity.

Tasks of type: "carry a dialogue on the theme X and extract the basic ideas from what the interlocutor says...or work in a group of three / five a drawing with the theme Y and then build a description in words of what you drew ... " are tasks engaging *interactivity*.

*The pedagogical projects abound by specifying the use of critical thinking methods but only taken as a name and not as the essence of their significance. Thus, methods such as star explosion, bunch method, cube method, etc. are ubiquitously present in projects, but a careful analysis of how they are designed and implemented demonstrates the lack of understanding of the very purpose of each of them.*

A simple use of the cube as a mean to establish the person who must give an answer does not mean to use the cube method. The drawing on the paper of different sort of branched schemas without a clear connection among the

structural elements does not mean to aim the essence of the bunch method. These methods have, each of them, very well defined educational purposes focused on engaging students in specific cognitive approaches based on inductive or deductive cognitive strategies. The given name of each method is less important but the essence must be understood. Unfortunately, it seems that the names are remembered and considered and the essence is totally or partially forgotten.

*Questioning in terms of a problem is confused with problem-solving.*

The problem solving asks for applying an already known algorithm or, in a more creative stage to combine already known algorithms in order to solve a given problem.

Questioning in terms of a problem seems to be more a principle of an active teaching strategy where the teachers know to create a problematic situation when they highlight a contradiction between what the students know and what it is asked, or put under the analytical approach.

For example, we can imagine the study of Lucian Blaga's Poetry: Light of Heaven. Poetry, in essence, deals with the perpetual and omnipresent struggle of opposites. Working with teenagers, the teacher can ask them to analyze the two verses "I have no heart in my head,/ neither brains aren't in my hear", and to connect them with the concept of rational love. This could generate a problematic situation, because of the intrinsic contradiction of the terms, that would lead to profound analyzes and fruitful debates, both intellectually and ethically and aesthetically. The creation of the problematic situation means only to develop a cognitive and emotional context with huge potential for the effective using of other methods of teaching focused on learning. In the specified example, could be used as learning teaching-methods the argued debate (in the form of court trial methods for instance), reflection, a demonstration using examples etc.

The literature abounds with materials about the modern methodology of teaching, sometimes good materials, or, other times, translations done by specialists in language but not in pedagogy that contain interesting but dangerous errors.

The in-service training of teachers is often done by people who don't show an in-depth understanding of the pedagogical meaning of what they teach. On the other side the beneficiary, the other teachers, are very content to memorize some ideas, to copy different procedures without a real concern for understanding them, and finally but not the last, to receive the credits and the documents for the personal portfolios. And this is all. The genuine development of their teaching competencies is not a part of this equation.

All these issues are springs of the previously presented confusions and of the gaps between ideal and reality of the educational field.

Something should be done. And probably the change of the philosophy about the teachers training could be the starting point of the change of teachers' mentality. This must, obviously, connected to a new way of understanding of the necessity that essence must be the king, not the perishable form.

This paper wants to be another pleading for renouncing to the brilliance of the surface in the educational process and to focus our attention to the essential aspects of what we are doing and of what is to be done.

Doing this in a proper manner can be a strong premise of street cleaning of knee-broken trousers, and broken into elbows clothes, and to replace these pretended and prefabricated proofs of a faked hard work, with some genuine proofs of a competent and intelligent work. This is the real seed of a bright future.

### **References: (selection)**

Bruffee, Kenneth A.(1993). Collaborative Learning: Higher Education, Interdependence, and the Authority of Knowledge. Baltimore: Johns Hopkins University Press

Cerghit, I. (1980). “Metode de învățare”, E.D.P., București, 1980

Ciorța, M. (2011). Didactica limbii și literaturii române în gimnaziu și liceu, Calitate, inovare, comunicare în sistemul de formare continuă a didacticienilor din învățământul superior, Alba Iulia.

De Bono E. (2003). “Gândirea laterală”, Ed. Curtea' Veche, 2003

De Bono E. (2009), “Cursul de gândire al lui' Edward de Bono”, Ed. Curtea Veche,

Dumitru, I. A. (2000).“Dezvoltarea gândirii critice și învățarea eficientă”, Editura de Vest, Timișoara,

Hesse-Biber S.(2015), The problems and prospects in the teaching of mixed methods research, [International Journal of Social Research Methodology](#) Volume 18, 2015 - Issue 5: The Teaching and Learning of Social Research Methods

Kolb, David A. (1984). Experiential Learning: Experience as the Source of Learning and Development. Englewood Cliffs, New Jersey: Prentice Hall, Inc.

Radu, I.T.( 1995). „Moduri și forme de organizare a procesului de învățământ”, în Cerghit, I., Radu, I.T., Popescu, E., Vlăsceanu, L., Didactica, EDP, București.

Schean, I. (2004). “Gândirea critică: metode active de predare- învățare”, Editura Dacia Educațional

Voiculescu, E. (2002). Metodologia predării-învățării și evaluării, Editura Ulise, Alba Iulia

Weston A. (2008), “Creativitatea în gândirea' critică”, Ed. All

<https://www.didactic.ro/revista-electronica/revista-electronica-didactic-ro-issn-aa844-4679-februarie-2-aa2/gandirea-critica-si-creativa-in-contextul-invatamanului-modern>

Gândire critică și creativă (2012) Universitatea Tehnică- Cluj Napoca

[http://asl.utcluj.ro/asl/files/Gandire\\_ppt.pdf](http://asl.utcluj.ro/asl/files/Gandire_ppt.pdf)

## PARTICULARITIES OF THE DEVELOPMENT OF THINKING AND LANGUAGE IN PRE-SCHOOLERS

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**Abstract:** *The article highlights particularities related to the development of thinking and language in preschool children and the importance of these two aspects in the formation of the child's personality and in the formation of the necessary skills for schooling. In order to get the arguments and formulations of hypotheses, we used the Goodenough Test and the Screening of Cognitive Skills, the form for educators, SCC 4-5 years, Screening of School Pre-requisites, form for educators, SPS 4-5 years. These samples were applied to a sample of 22 subjects, girls and boys aged 4 to 5 years.*

**Key words:** *thinking; language; children; evaluation; skills for schooling;*

### 1. Introduction

The evolution of the personality of each individual depends on the basis of development. These bases are laid down in the preschool age, which is considered a quiet period, between a strong development and the increase of the first years of life and the school age. Therefore, it is a suitable age for the development of the main psychic processes (memory, thinking, language and emotional affective manifestations).

Thinking plays an important role in the human psychic system, being defined as a succession of operations that will lead to the disclosure of important life hypotheses and to solving certain problems. During preschool, brain activity is intense, at this age child ask a lot of questions about any aspect of reality. Through language, preschool develops autonomy, also gives him the ability to move easily into the environment and to interact with people around him. Therefore, the ability to communicate with those around him helps the child to express his thoughts, ideas, impressions so that he can understand and form a basis for his school and social activity.

## 2. Theoretical foundation

Pre-schooling, the development period of 3-6 / 7 years of age, brings a series of changes in both mental and relational development plans. During pre-school, brain activity is intense, children ask questions about any aspect. Therefore, it is advisable to respond calmly and gently to all questions, because at this time the children accumulate important information, even more than during schooling.

„ Thinking of the preschool is intuitive and preoperative. It is a preconception and quasi-conceptual thinking, which means that it operates with a series of constructs that are neither individualized notions or general notions. The concrete thinking of the child differs very little from his real impressions. The child is capable of symbolic thinking with the use of words.” (Schwartz, G., Kelemen, G., 2006, p. 94)

Preconception and intuitive thinking is an egocentric thinking, failing to distinguish between objective and personal reality, generating egocentrism, preschooler being the center of the universe, believing that everything is "spinning" around him.

Around the age of 3, the child is at the start of the preoperative stage because the child does not understand the certain rules or operations yet. According to Piaget, the child at this stage has not acquired the conservation of invariants such as quantity, weight or volume. (Moldovan, Ignat, BălașTimar,2011)

The preschool begins to speak, to use mental symbols, thus becoming able to use thoughts and ideas in order to better understand what surrounds him. At this age, he has the opportunity to play certain roles in symbolic games such as "mother", "father", "doctor", etc. These games aim to develop imaginary game, as words are meant to replace concrete situations. At the pre-school age, the child can only manipulate the objects in front of him, he cannot imagine and cannot work with ideas and things that are abstract.

Through logical classifications, children understand the relationship between events and unite experiences. "The ability to achieve classifications increases during pre-school years, but remains fragile and suffers a decrease when the situation becomes larger. When children collect stamps, they organize them according to different criteria: stamps come from different countries, from different years, they are from different domains. Then, preschoolers are not able to achieve complex object classifications, using few attributes of objects. " (Golu, F., 2015, p. 103)

Another aspect of thinking at this preoperative stage is causality. In this period of early childhood, children are not capable to understand the cause and effect, they correlate certain phenomena even though there is no causal relationship between them. This is the "why" period that every child goes through at this age. The answers we give to the child must have an



educational and informative role. They will often be the starting point for other questions that the child will continue to ask.

„Bruner (1987) suggests that the reason a child learns to speak is his desire to communicate with the person who takes care of him. (Muntean, A., 2006)

Language acquisition involves a number of specific skills and abilities. As with motor development, age, maturation process is important, because when they are raised in typical conditions, children acquire language after a program they have in the nervous system as part of their genetic endowment.” (Schaffer, 2007, p.286)

Language development for preschoolers is strongly influenced by the environment in which child lives, how much their parents speak with him, how much he is encouraged to use language in communication. That is why at this age there are differences between children (if is not properly stimulated the child will speak later). Acquiring verbal structures is done by imitating parents, and then by respecting the models proposed by the kindergarten. Kindergarten provides pre-school students with knowledge and helps them to form skills to properly flex nouns by gender, number and case, and verbs by person, number and time.

When entering the institutionalized kindergarten, pre-school children have different communication experiences, either with other children or with adults, and this is closely related to the environment they come from. Therefore, at this stage, adults must focus on the content of language with the child, they should teach the child the names of objects, formulate and pronounce correctly words and sentences.

At the same time, several types of language are used in this age. The "egocentric language" is described by Piaget as a "conversation" with its own person, meaning a certain exercise for the future social language. This discussion is aimed both at pronouncing the words correctly and in supporting the various activities they perform individually. The child may be near another person, an adult or a child, but he speaks without the intention of communicating to him, without wanting to receive what he says and understand. It is therefore an intermediate form between the actual and the external language itself. (Tinca Cretu, 2016)

Another type of language used by preschoolers is the collective monologue that is predominantly encountered in groups of children where everyone seems to speak only to him using his own language without being bothered by what his colleagues say. The socialized language is related to the needs of other people around, aiming to establish contacts and relationships.

At present, pre-school children enter in the preparatory class with a special training. Kindergarten, being the first link of the education system, will need to know how children's intellect works, to identify the areas in

which they are inclined to predict each child. The child who is fit to be taught has some skills: to observe, to analyze, to listen to certain requirements, to answer questions, to formulate, to complete or correct colleagues' answers, these skills being in the teacher's attention throughout the kindergarten.

The observation activity carried out in the kindergarten involves the active and systematic perception of objects or phenomena of the environment, being a source of impressions that pre-school children accumulate and exploit throughout their lives. Through this activity, the sensory basis of the knowledge process will develop, stimulate intellectual processes, ensure the understanding of simple relationships between objects and phenomena of nature. The most important part of the observation is the perception of the material, its analysis with the help of sense organs, directly involved in thinking operations such as analysis and synthesis. This method is dominated by communication and assimilation of knowledge, being necessary for adaptation at school entrance.

At the same time, stories and retellings have a great importance in cognitive and language development because at the entrance to school many students do not know how to express their opinion, their vocabulary being made up of few words and expressions. With the help of stories, children learn new phrases, which once known, come into their vocabulary. "Besides giving the child the opportunity to learn to understand the thoughts and feelings of the people, he acquaints the child with the structure of the language, with the richness of the grammatical forms, with the expressivity of the tongue" (Tătaru, L., Glava, A., Chiş, O., 2014, p. 209) Also, through the stories, pre-school children learn to distinguish the good from evil, they even find models of positive heroes, influencing the formation of children's personality and their behavior and attitude in certain situations of life .

The development of language implies the assimilation of a lexical background and the meaning of words, grammatical structures. By organizing of didactic games such as "I say one, you say a lot", preschooler will have the task of correctly using the singular and plural number of nouns in communication, a didactic game such as, "Multiple Meaning Words" where the child will identify the different meanings of the words with the help of images, another example of a game is "Who You Send Letters ", a game which the child will learn to use the dative in the expression correctly.

Learning graphs plays an important role in preparation for school because it teaches pre-school children to write certain graphic signs that will later become letters. So, at the end of kindergarten, the child will know certain letters of the alphabet, he / she will be able to write his own name, which will help him / her in the development of the written language.

### **3. Objectives of the study**

O1. Assessment of cognitive skills of the 4-5-year-old child: attention, memory, categorization, language, problem planning and problem solving, as observed by the educator.

O2. Assessment of pre-requisites for schooling: prerequisites for writing and reading, mathematical prerequisites, as well as knowledge about cognitive functioning, as observed by the educator.

O3. The evaluation of intelligence, respectively the degree of intellectual maturation of children of 4-5 years, expressed by drawing.

### **4. The assumptions of the study**

Hypothesis 1: There is a statistically significant (positive) direct correlation between the child's cognitive skills of 4-5 years and the pre-requisites of schooling.

Hypothesis 2: There is a statistically significant (positive) direct correlation between the level of intelligence (intellectual maturation degree) and the cognitive skills of the child for 4-5 years.

Hypothesis 3: There is a statistically significant (positive) direct correlation between the level of intelligence (degree of intellectual maturation) and the pre-requisites of schooling.

### **5. Sample**

The working tools focused on a sample of 22 pre-school children aged between 4 and 5 years, from Kindergarten P.P. Number 14, Arad. The scales of cognitive skills screening and pre-requisites for schooling were completed by the teacher for each child in the sample, according to the methodological evaluation procedures. The Goodenough test was applied to children in the sample. The study was conducted in March 2017.

The age group of 4-5 years has been chosen because at this stage both thinking and language are in the process of being developed, and any pronunciation errors or problems in the cognitive sphere can be remedied. All children in the sample are part of the same group. The group follows a traditional curriculum and is part of mass education. Subjects come from normal families that do not have dysfunctions.

Regarding the distribution of subjects investigated by gender / sex, the preschool group consists of 12 boys and 10 girls

Table 1: Distribution of the investigated sample by sex / gender

Sex		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Boys	12	54,5	54,5	54,5
	Girls	10	45,5	45,5	100,0
	Total	22	100,0	100,0	

## 6. Methods and tests used in research

During the research, I wanted to give arguments in favor of the hypotheses formulated, that is why I used the Goodenough Test, the Cognitive Skills Screening for 4-5 years, the form for educators and the Screening of the pre-requisites of the schooling.

The Goodenough test - the test of the little man, highlights at least three aspects that can be considered separately or correlatively: cognitive development (the most widely accepted and most validated psychometric), dimension related to the personality plan and one that shows an exceptional ability or talent for drawing (used in selection but also in vocational training). We have applied this test to determine the degree of cognitive development of middle-class preschoolers.

This test was applied individually to each preschool. Each subject received a piece of paper, a box of seven colored pencils: blue, green, red, yellow, purple, brown, black, as well as a black pencil, an eraser. The educator told to children that they would draw a little man on that sheet of paper as beautiful as they can and if they want they can paint their draw. The subject will be left to draw as he wishes without support and without criticism, appreciation or suggestion

Preschoolers who are undecided can be encouraged with formulas such as: "You are doing very well, continue." If the child asks how to draw the teacher answer: "Do what you want, how you want to do."

The subject will be left to choose on which part of the sheet he draws, what dimensions will have his draw, the character of the drawn character, theme, the colors used or to refuse to paint his draw, each choice that child makes has a meaning.

Cognitive Skills Screening, Form for Educators-SCC-E 4-5 (by COGNITROM) evaluates cognitive skills from the perspective of several features: attention, memory, categorization, problem-solving and problem-solving (comprehension and expression). To evaluate cognitive skills, we used the 4-5-year scale (from 4 years to one day and up to 5 years), the variants for educators.

Each item has an answer on a 5-point scale, where 1 signifies almost never, and 5 means almost always. The educator will circle only one answer to each item. If the person completing that questionnaire did not notice the behavior described in those statements, she would have to approximate a response that is closest to the child's behavior.

The screening of cognitive skills, the form for educators - SCC-E 4-5, contains 21 items describing a series of behaviors that preschoolers 4-5 years of age should do. These behaviors were observed by the educator during the group activities. Items have been distributed in several sizes:

- Items 1 and 2 evaluate the attention;
- Items: 3,4 and 5 belong to the memory dimension;
- Items 6, 7 and 8 belong to the rating dimension:
- Items 9,10,11,12 belong to the dimension planning and problem solving;
- Items 13, 14, 15, 16 evaluate comprehension, and items 17, 18, 19, 20, 21 refer to expression, also, they belong to the language dimension.

At the age of 4-5 years, an improvement in focus may be seen. Children can concentrate in an individual activity for about 10-15 minutes, and in group tasks about 20 minutes.

With regard to memory, children can tell a story that has been heard, especially because language skills are better developed.

Also, the categorization becomes more extensive. Children can group different objects according to two criteria at the same time: by the form and color or by the size and utility. At this age, the preschool can identify, using images, sequences that refer to four actions and can place them in the chronological order of deployment. At the same time, the child can solve a problem without the adult's intervention, such as the loss of a favorite toy.

From the point of view of comprehension and language expression, they take increasingly complex forms, starting from the identification of simple rhymes and ending with the rendering of the main ideas of stories and details from the stories.

Another questionnaire applied to preschoolers is Screening of prerequisites for schooling, version for educators - SPS 4-5 - Cognitrom. Prerequisites for schooling are specific academic or cognitive abilities. This questionnaire contains 14 relevant items for the age of 4-5 years.

Scale items are statements describing those defining behaviors that a child needs to acquire according to his cognitive development. The educator will read the 14 items and will try the YES if the preschool has the experience and NOT if he / she does not show the skills. A single answer will be marked on each affirmation, and if the educator is not sure of the statement, he will choose the nearest answer to what he thinks.

Items are distributed according to three dimensions:

- Items 1, 2, 9, 10, 11, 12, 13 comprise the field of written and read pre-requisites;
- Items 3, 4, 5, 6 belong to the mathematical prerequisite;
- Items 7, 8, 14 encompass knowledge about cognitive functioning.

In the case of educators, the number of items for reading and writing is higher because they have more information about these aspects. For the ability to write and read, it is very important to trace lines in zigzag, color the inside of a circle, copy certain geometric figures following a given pattern. Regarding mathematical prerequisites, it is essential that the preschool knows how to count up to five and to locate the number in the range of objects.

Concerning knowledge about cognitive functioning, the scale includes items starting from "mind theory", meaning that the child understands that two people can have different views on the same situation. This subscale also includes items describing the awareness of certain limits of capacity, the child realizes that it cannot solve a task. Since the child can distinguish between reality and fiction at the age of 4-5 years, thus exceeding the stage of thinking magical, realizing that the characters in the stories do not actually exist, the assessment of this aspect is important for the cognitive development of preschoolers.

## 7. Data analysis.

Hypothesis 1: There is a statistically significant (positive) direct correlation between the child's cognitive skills of 4-5 years and the pre-requisites of schooling.

To test this hypothesis, we used the Pearson correlation coefficient.

Table 2 on the correlation between cognitive skills and pre-requisites for schooling

### Correlations

		Cognitive skills	Prerequisites for schooling
Cognitive skills	Pearson Correlation	1	,598**
	Sig. (2-tailed)		,003
	N	22	22
Prerequisites for schooling	for Pearson Correlation	,598**	1
	Sig. (2-tailed)	,003	
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\*\* Correlation is significant at the 0.01 level (2-tailed).

According to the table, a correlation coefficient  $r = 0.598$  significantly was obtained at a threshold of  $p < 0.01$ , between the cognitive competences and the pre-requisites of the schooling. Thus, hypothesis 1 is confirmed, there is a statistically significant (positive) correlation between the cognitive skills of the 4-5-year-old child and the pre-requisites of schooling, between the two variables being a positive, directly proportional correlation. That is, an increase or decrease in the values of the first variable (Cognitive Skills) corresponds to an increase or decrease of the second variable (Prerequisites of Schooling). The higher or lower the level of cognitive competence development, the higher / lower the level of acquisition of schooling prerequisites.

The value of the Pearson coefficient is 0.598, which indicates the existence of a medium intensity correlation. The significance threshold is 0.003, that is, less than 0.01, indicating that the test is significant.

If a child is able to focus on an activity for a certain period of time, he knows the figures by their form, but also associates the figure with the quantity, if he easily memorizes poems and songs, if he knows how to divide objects into groups according to color, thickness, size, if he understands and can tell with his words a heard story and describe some details of that story, if he manages to draw some geometric figures without help or if he colors the inside of a figure without exceeding the contour, then the child presents and a significant development of pre-requisites for schooling.

Hypothesis 2: There is a statistically significant (positive) direct correlation between the level of intelligence (intellectual maturation degree) and the cognitive skills of the child for 4-5 years.

To test this hypothesis, we used the Pearson correlation coefficient.

Table 3: The correlation between the level of intelligence (degree of intellectual maturity) and cognitive skills

**Correlations**

		Cognitive skills	Intelligence / degree of intellectual maturity
Cognitive skills	Pearson Correlation	1	,702**
	Sig. (2-tailed)		,000
	N	22	22
Intelligence / degree of intellectual maturity	Pearson Correlation	,702**	1
	Sig. (2-tailed)	,000	
	N	22	22

\*\* . Correlation is significant at the 0.01 level (2-tailed).

According to the table, a correlation coefficient  $r = 0.702$  was obtained at a threshold  $p < 0.01$ , between the level of intelligence (intellectual maturation degree) and cognitive skills. Thus I. 2 is confirmed, between the two variables there is a positive correlation, directly proportional. That is, an increase or a decrease in the values of the first variable (Intelligence / Degree of Intellectual Maturity) corresponds to an increase or decrease of the second variable (cognitive competences). The higher / lower the level of intelligence / intellectual maturation, the higher / lower the level of cognitive competence development.

The value of the Pearson coefficient is 0.702, indicating a correlation of medium to good intensity. The significance threshold is 0.000, that is, less than 0.01, which indicates that the test is significant.

If a child has a good intellectual maturity (good degree of intellectual maturation), then that child is able to focus attention, also he can easily memorize poems, he knows how to share objects in groups according to color, thickness, size, understanding and he can tell a story with his own words.

Hypothesis 3: There is a statistically significant (positive) correlation between the level of intelligence (the degree of intellectual maturation) and the pre-requisites of schooling. To test this hypothesis, we used the Pearson correlation coefficient.



Table 4: Correlation between the level of intelligence (degree of intellectual maturity) and prerequisites for schooling

**Correlations**

	Level of intelligence (degree of intellectual maturity)	prerequisites for schooling
Level of intelligence (degree of intellectual maturity)	1	,688**
Pearson Correlation		
Sig. (2-tailed)		,000
N	22	22
Prerequisites for schooling	,688**	1
Pearson Correlation		
Sig. (2-tailed)	,000	
N	22	22

\*\* . Correlation is significant at the 0.01 level (2-tailed).

According to the table, a correlation coefficient  $r = 0.688$  significant was obtained at a threshold  $p < 0.01$ , between the level of intelligence (intellectual maturation degree) and the cognitive skills. Thus hypothesis 3 is confirmed, between the two variables being a positive correlation, directly proportional. That is, an increase or decrease in the values of the first variable (Intelligence / Degree of Intellectual Maturity) corresponds to an increase or decrease of the second variable (the prerequisites of the schooling).

The higher / lower the level of intelligence / intellectual maturation, the higher / lower the level of acquisition of pre-requisites for schooling.

The value of the Pearson coefficient is 0.688, indicating the existence of a medium intensity correlation. The significance threshold is 0.000, that is, less than 0.01, which indicates that the test is significant.

If a child has a good intellectual (good degree of intellectual maturity), then the child also has a significant development of the pre-requisites of schooling, he will be able to adapt to the requirements of schooling, he can

perform simple assembly and lowering operations, also he can write or read by doing these actions consciously.

### **8. Conclusions**

The data obtained from the research confirmed the first hypothesis from which we started, namely that there is a direct correlation between the child's cognitive competences of 4-5 years and the pre-requisites of schooling. Therefore, the higher or lower the level of cognitive competence development, the higher / lower the level of acquisition of schooling prerequisites.

When a child can focus on an activity, he knows the figures by their form, but also associates the figure with the quantity, if he easily memorizes poems and songs, if he can share objects in groups according to color, thickness, size, if he understands and can tell a story with his words, if he manages to draw some geometric figures without help, or if he colors the inside of a figure without exceeding the contour, then the child also presents a significant development of the prerequisites of schooling.

At the same time, the second hypothesis, which expresses the fact that there is a direct positive correlation between the intelligence level and the cognitive skills of the child, was confirmed because a correlation coefficient  $r = 0.702$  significant was obtained at a threshold  $p < 0.01$ , between the level of intelligence (degree of intellectual maturation) and cognitive skills. If a child has a good intellectual maturity (good degree of intellectual maturation), then that child is able to focus attention, easily memorize poems, knows how to share objects in groups according to color, thickness, size, understands and can tell with his words a heard story.

The third hypothesis regarding the existence of a direct, statistically significant correlation between the level of intelligence and the pre-requisites of schooling is confirmed. The value of the Pearson coefficient is 0.688, indicating the existence of a medium intensity correlation. The significance threshold is 0.000, that is, less than 0.01, which indicates that the test is significant. If a child has a good intellectual (good intellectual maturity) coefficient, then that child also has a significant development of school prerequisites.

One of the limits of the research would be the small size of the sample (22 subjects) with repercussions on representativeness. Another limit of research would be the lack of comparison with other groups (preschoolers from other groups, other kindergartens, other educational alternatives, other forms of funding). Investigating intelligence through a single projective test, the Goodenough test, is another limit of this research because applying other intelligence tests on the same sample will bring more accuracy.

In the future, this research could continue using procedures to configure a representative sample of subjects for more significant accuracy. Also, we could investigate the thinking, language and prerequisites of schooling through other tools (other questionnaires, scales, tests) so that the results obtained can be compared to each other.

### **References:**

- Crețu, T., (2016), *Psihologia vârstelor*, Polirom, Iași
- Golu, F., (2015), *Manual de psihologia dezvoltării: o abordare psihodinamică*, Polirom, Iași
- Moldovan, O., S. Ignat, S., Bălaș-Timar, D., (2011), *Fundamentele Psihologiei I*, Editura Universității „Aurel Vlaicu” Arad.
- Muntean, A., (2006), *Psihologia dezvoltării umane*, Editura Polirom, Iași
- Schwartz, Gh., Kelemen, G., (2006) *Psihologia copilului*, Editura Universității „Aurel Vlaicu” Arad.
- Shaffer, R., (2007), *Introducere în psihologia copilului*, Editura ASCR, Cluj Napoca
- Tătaru, L., Glava, A., Chiș, O., (2014) *Piramida Cunoașterii-repere metodice în aplicarea curriculumului preșcolar*, Editura Diamant, Pitești.

## MUTUAL READING TECHNIQUE

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**Abstract:** *The concept of Mutual Reading was born of a need to increase participation in the learning activity of ALL students, not just a few, those with a sustained pace in solving school tasks, those with an increased need for affirmation. Mutual reading is a technique that can be used as a current assessment method whenever students perform an individual activity. The technique of mutual reading stimulates and creates conditions for the participation of all students in didactic activity, supports interactivity, is strongly activating, enhances self-esteem, facilitates and provokes learning. The paper provides some examples and recommendations for the efficient use of mutual read technique. Also, the paper includes the results of a research, results that confirm the value of this didactic technique.*

**Keywords:** *mutual reading; interactivity; continuous evaluation; individual work;*

### **Introduction**

The technique of mutual reading is a pedagogical concept that designates a working technique that can be used in school / academic learning after each sequence of independent activity, with the aim:

- to share with colleagues in the small group the way to solve individually;
- to express, at the level of the small group, the way of solving a problem, his own opinion, a personal opinion;
- to have a first evaluation of the learning outcomes, by confronting the solutions, the opinions, the others' opinions.

### **A short research**

We started from the hypothesis that mutual reading stimulates and creates the educational context for the participation of all students in the course activity and implicitly facilitates and provokes learning.

A questionnaire was provided to students through Google Drive. It was completed by 102 students attending pedagogical courses where the technique of mutual reading is frequently used. The questionnaire contains 10 questions, of which 2 refer to the technique of mutual reading:

1. Check the techniques you consider facilitate learning in the activities of the pedagogy course.
2. Give value to each other's reading (small group reading, what each person did, by individual work; (1 useless - 5 very useful);

We also used direct observation as a research method.

All the students that participated to the research chose the mutual reading technique as being one that facilitates learning and 4.1 is the average obtained by it as a degree of appreciation of the learning facilitating level.

Following direct participatory observation, it can be appreciated that mutual reading as a working technique made all the students present to achieve the theme and then expressed their opinion / how to solve the problem solved by individual work.

By using mutual reading, it has been eliminated, the possibility that some of them, in the tendency to remain in the comfort zone, may indulge in the situation of passive participation in the activity. The technique put every student in the position of being listened, which motivated them.

The students' appreciations at the end of the courses, referring to the mutual reading, mention: the interactive, stimulating nature of the activities, the increased interest, the involvement, the specialized language skills, the attractiveness, the dynamism, the increase of the self-esteem, the imperceptible transition of time.

The results obtained by interpreting the answers to the questionnaire, the conclusions of the participatory direct observation of the teacher - researcher and the students' assessments confirm the hypothesis that the technique of mutual reading stimulates and creates conditions for the participation of all students in the activity from the course and implicitly facilitates and provokes learning.

Following the results of the short research, we will try to bring examples of good practices, which the teacher can use in didactic activity to maximize the efficiency of the mutual reading technique.

## **1. Examples of good practice**

### **Example I**

1. Divide the class into working groups of four or five students according to the class.
2. Pupils solve an exercise or answer a few questions through individual activity.
3. After working time is up, individually, each student reads the other colleagues in the small group what he has written.
4. For a few minutes, depending on the complexity of the task, the solutions, the results or the personal opinions formulated are discussed in the small group.
5. The points of view they disagree with in the small group can become topics of discussion for the whole class through frontal activity.

### **Example II**

1. The activity takes place in pairs.
2. Students solve an exercise or answer a few questions individually.
3. After the working time is up, through individual activity, each explains the other, the way of solving. At the same time, with a coloured pencil, he makes the correction of his own mistakes, under the observation and direct involvement of his colleague.
4. Then the roles change.
5. At the end of the sequence, each performs self-evaluation, correction, identification of the cause that has generated the mistake and the correct way to solve it.
6. By a metacognition exercise, he analyses the solution, the steps, the errors and the way the tasks of that type can be solved in order to avoid mistakes.

## **II. Recommendations for a good functioning:**

1. Announce students that, at the end of their individual work, they will make mutual reading. This will make them work with more responsibility, from the need to have what they share with colleagues, according to social observation theory.
2. Provide those with communication and relationship problems the possibility to choose the colleague they want to work with.
3. It can be used to carry out ongoing evaluation whenever there is an individual activity.
4. Give special time to reflection and metacognition: How did I manage to work correctly? Why didn't I reach the desired result? What else should I do?

## Conclusions

As a result of the use of this technique, over time, the psycho-didactical reflections made with thousands of participants trainee in projects such as: Mentoring for Rural Teachers, Studium, Professionals for After-school, teachers participating in the preparation for obtaining the didactic degrees, students as future teachers, from the conclusions of focus groups organized during the pedagogical meetings, the mentor teachers' working sessions, the advantages identified are:

1. Each student will have his time when he is listened to by colleagues. He will feel useful and important, which will contribute to the development of his self-esteem.

2. It takes a little time and ensures the participation of each student in the activity. Nobody is excluded.

Each has his own moment of expressing his personal point of view, of his own way of solving. A first evaluation is carried out. It provides the possibility of displaying the learning results of each student. Some of the errors are identified by confronting responses, opinions, and shared ways of solving.

3. The differences of opinion, the different ways of solving give the pretext for group discussions on the given topic.

4. It ensures time multiplying. At the same time, in the classroom / course, by matching the intensity of the voice to the specifics of the work in the small group. Students speak in a number equal to the number of working groups. If we use classical frontal activity to evaluate the outcomes of individual activity, some students, 2-3, share their opinions, achievements; usually those who finish first. The risk is that, as a matter of course, a large number of students may no longer carry out the exercise for individual work because they know they will not be listened. Under these conditions, for many students, that time is a lost one because they did nothing.

## References

- Burke Walsh, K. (1998). Creating classes targeted needs children 8-9-10 years CEDP Step by Step. Bucharest.
- Cerghit, I. (2003). Alternative and complementary Training Systems. Aramis Publishing House. Bucharest.
- Chişiu, C., M., (2016). *A student oriented school. The student, an active partner in his own learning process*. Lambert Academic Publishing. Saarbrücken.
- Chişiu, C.M. (2011). Pedagogy. Theory and Training Methodology. Assessment Theory and Methodology, Course Notes. "Lucian Blaga" University of Sibiu Publishing House. Sibiu.

- Popa C., M., (2007). The Interactive Lecture, an Alternative in the Universe, The 31st ANNUAL CONGRESS OF THE AMERICAN ROMANIAN ACADEMY OF ARTS AND SCIENCES, Pro-active partnership in creativity for the next generation, Presses internationals Polytechnique Constance Forest Directrice, CP6079, Succ. Center-ville bur.B-528.8 Montreal (Quebec) H3C 3A7 Canada, The National Library Quebec Canada, conference volume organized by ARA, professional society, pp. 618-621.
- Popa, C., M., (2009). A Student-Centered School. The Student, an Active Partner in the Learning Process, Aramis Publishing House. Bucharest.
- Steiner, R. (2001). Art Education. Methodology and Teaching (second edition). Triads Publishing House. Cluj - Napoca.



## THE INFLUENCE OF REWARDS USED IN CHILD EDUCATION OVER THE DEVELOPMENT OF THEIR PERSONALITY

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**Abstract:** *Rewards are used as methods of educating pupils / children in the educational system, in school and in the family. Their role is to encourage, enforce, stimulate and confirm the accepted behaviour in the social and cultural environment in which the pupil / child is activating. Reward is actually a compensation for a positive action or activity, for a desirable behaviour. It can be of a material or emotional nature. We reward somebody in order to determine him to continue to be good, to repeat a certain behaviour or action because they help him progress and develop from a personal and professional point of view. The research regarding the reward system was done together with the students from West University of Timisoara. Its purpose was to emphasise the way in which rewards influence the development of one's personality.*

**Key words:** *rewards; praise; pupils/children; school; family;*

### Introduction

Rewards started to be used generously in the educational system once the behaviourist thinking system was introduced. J. B. Watson is considered the father of behaviourist although this current was put in place by E. L. Thorndike (learning by trial and error / trial and success, reward / punishment, the law of result) and I. P. Pavlov (classical conditioning – *conditioning before the behaviour*). The most influential supporter of this thinking system was B. F. Skinner (operant / instrumental conditioning – the accent is put on conditioning the behaviour) who, by using the research tool called “Skinner’s box”, tried to prove that behaviour is operant.

The basic concepts that Skinner operated with were positive reinforcement, negative reinforcement and punishment. “Positive reinforcement builds behaviour” according to Skinner (1971:160). Positive reinforcement considers that a behaviour that is stimulated in a desirable way or if it is rewarded there are great chances that it will be repeated or that it will be manifested in similar situations. Behaviour can be modified, modelled, “trained” by means of various reinforcement patterns from the external environment. This whole process is called operant conditioning. An operant represents any kind of behaviour that when it acts upon an environment it also produces consequences on it.

Operant conditioning refers to modelling or increasing the action frequency of behaviour, according to a predetermined model, strengthening or rewarding desirable behaviour when it is manifested. During conditioning expectancy appears, beliefs are developed and conviction that something is going to happen appears. If we consider classical conditioning the belief that certain stimuli will be followed by other stimuli appears (when turning on the light food appears) or, if we consider operant behaviour, that certain behaviours will generate certain results. Behaviourists have experimented with animal behaviour: dogs, cats, rats, pigeons etc.

Also, according to the theory of self-worth, people choose to become conformists or deviants depending on what will increase their respect and self-worth. For most people self-worth is generated and maintained by conforming to group expectancy of belonging or of reference. We can include here parents, teachers, relatives, friends, the group, the community we belong to. Conforming to group expectancy will be rewarded in a formal or informal way. People who are not rewarded at home or in school consider they “are not seen” or “are not heard” (Agabrian 2003:193).

On the other hand, according to Travis Hirschi’s control theory (1969) each of us has various motives to become deviant, because each of us wants more than one can get. Despite this, most people conform! What determines this behaviour? According to Hirschi, most people are conformists because of their duties, responsibilities to their peers and their strong ties to the conventional society, whether it is parents, school, church, friends or community. Responsibilities and social duties are the ones that reward people for their social behaviour (Agabrian 2003:193 ).

In his books Alfie Kohn brings various arguments based on scientific studies against rewards. “Rewards punish (...) and exercise just as much control as punishments, even if they operate by seduction” (2014:53). Alfie Kohn considers that a reward is “an object or a wanted event which is conditioned by the fulfilment of certain criteria: if you do this you will get this” (2014:54).

## Methodology

The research was done during January-June 2017 period. The test sample was made up of 50 students from almost all faculties and from years I, II, III and Master's degree from West University of Timisoara. The research method was of qualitative nature – the partly structured interview, with the following key questions: if they have been rewarded what sort of method was used; what did it mean for them; who rewarded them (the family, school); in what situation was the reward used; how often have they been rewarded; how did they feel, what have they thought when they were rewarded; did they recognize their reward; was their personality influenced by the reward etc.

## Research objectives:

6. Defining the concept of reward;
7. Identifying the causes that generate the use of reward in the education of the child / pupil;
8. Identifying the compensation methods used in the educational system;
9. Analysing the ways in which the rewards influence personality development;
10. Alternate methods to reward.

## Research hypothesis

The more often children are rewarded the more conformist and dependent on other people's opinions they become.

## Results

### 1. F.P.

*"I was often praised. Sometimes I did not even deserve the praise, but because I was labelled as a good student, tenacious and intelligent, I always got the praise. I got diplomas, honours and awards in the Olympic competitions; I got gold and silver medals and trophies in sports competitions; I got very good marks in school – sometimes I did not deserve the best mark, but again my label as a good student helped. But maybe I am wrong in this respect. I got gifts from teachers – motivational letters, books, bookmarks and flowers. As a child I was "bribed" with sweets and toys to go to the doctor. My mother always wanted to reward my studying effort with a*

*gift at the end of the semester (clothes, books, trips, a phone). Sometimes I would have been delighted to have some of her attention and time to tell her about a day in my life, all the good moments or the unrest I was facing.”*

## **2. C.F.**

*“I was rewarded with prizes in competitions and the Olympics. It is wrong in a way that at a very young age we are inoculated with the idea of competition and the sometimes exaggerated wish to be the best. Especially in the Olympic contests the judges were not always fair. Many times, as a student, I was disappointed by such things and I was much more discouraged than motivated.”*

## **3. B.A.**

*“My relationship with my parents was mostly based on communication and open discussions and less on the idea that “if you do this, you will get something” and the other way around. It happened to me to be punished and rewarded as well, but there was nothing special about it. I did not have any punishments that I did not understand or successes that I felt went unnoticed. In school my rewards were mainly grades, awards or diplomas. Although I was happy about them, I came to realise that the opinion of the right people and self-evaluation were more important. There are two prizes or rewards that have marked me, but not because of their importance, but because of the context and the people there. When I was in the 3<sup>rd</sup> grade I wrote a composition about spring for the Romanian language class and after reading it, the teacher decided that it should be published in the school paper. In my mind, the school paper was for older students, privileged and good at everything they did. The fact that my composition was good enough for the school paper was more important to me than any mark. What I thought was important was the fact that the teacher did not make any remarks such as “it is the best composition”, did not mark it, did not compare it with anything, but just took it as it was. In the 10<sup>th</sup> grade I got my first prize while studying with my new musical instrument teacher – and I got the feeling that after a year I finally managed to make her proud. But because I do not see good or bad marks as being absolute, then I tend to treat them as common consequences of my actions.”*

#### **4. O. N.**

*“Marks – I was always happy when I got good results up until the 9<sup>th</sup> grade – this was my way of asserting myself. Money – at some point my uncles would reward me with money for good marks, but I was not motivated by this. Fun – while in high-school, if I did my homework in school I was allowed to go out. When I finished high-school I was congratulated by my Maths and Romanian language teachers which made me feel extraordinary. I felt that my family was pleased with me as well. All this made me feel very good and content with myself.”*

#### **5. S.N.**

*“Rewards – During my primary school my rewards was sweets or my mother would cook for me my favourite food or take me to McDonald’s. During 5<sup>th</sup> to 8<sup>th</sup> grade my rewards were clothes and books. I became passionate about reading and I was not studying for rewards anymore, but because I wanted to prove to myself and to others that I was the best! In school, during 9<sup>th</sup> to 12<sup>th</sup> grade I got a lot of diplomas. I have a bunch of them at home. That is how I perceived success, through diplomas. Because I wanted to be the best and to be respected I worked for diplomas and good marks, although what I should have been interested in was the information in itself.”*

#### **6. U.R.**

*“When I was in high-school, but also in primary classes it happened to me a lot to receive rewards for my interest in learning. The marks, diplomas and awards that I got were proof to me that I was able to study and they brought me a lot of satisfaction.”*

#### **7. N.D.**

*“Praise – from my grandparents, my dad. When I managed to do something and when I got good grades I felt I was appreciated and I always wanted to succeed in my tasks; Appreciation – from my dad. In every situation I felt I was important to him, even when I did not perform at my best. He always found something to appreciate and this gave me courage to continue. Encouragement – from my dad. Even when I got a bad mark in Maths, he saw that I was trying hard and he would encourage me and because of his encouragement I managed to get over a lot of things in school. I owe my love for Maths to him and the fact that I study at a university in the same field.”*

### **8. G. H.**

*“Teachers always praised me, appreciated me and offered me small gifts (books) in order to encourage me to keep learning just as well. For me these things did not have any special value. I was happy for some time, but they reminded me how little I knew and how slow I was progressing. My parents never rewarded me. Their appreciation for me was always spoken. They always told me: “I don’t even expect anything else from you. You are good!” In my soul the only rewards that make me happy come from God. I call them blessings. My health, my money, my family, friends, everything I have I get them from His hands.”*

### **9. K.M.**

*“During secondary school, in classes V-VIII, I always had highest marks – even when I deserved a lower mark teachers would forgive me. I participated in all sorts of contests and Olympics, I got diplomas, prizes and honourable mentions. In high school I won awards in contests and English Olympics. My colleagues listened to my opinion, I was trusted; I remember the contentment and pride of my parents and relatives. On the inside I felt a somewhat selfish pride in being the first in my class. I have proved to myself what I can do and my teachers and parents trusted me.”*

### **10. F.M.**

*“For me the biggest reward was my parents’ contentment. I also got rewarded with diplomas from various contests and Olympics and with special results (such as at the Baccalaureate).”*

### **11. A.N.**

*Toys from my parents if I was a good kid. It made me really happy, I felt rewarded for my efforts. My grandparents in the country offered me money for my birthday every time I visited. These rewards made me feel loved because it was not something I had to work for, but they also made me consider that I deserved more than I got. My parents gave me money as a reward for various house activities (vacuuming, washing the dishes). These rewards made me feel good because I felt that I have worked for the money. This is how I started to learn that money imply work and I should be more careful with it. I got praises from my relatives for my school results or*

*contest results and they made me feel appreciated. Marks were the main rewards for which I have studied and I have done my duty. Good marks made me have a good opinion of myself and have influenced me in a positive manner and motivated me. The diplomas from year's end or from the Olympic contests made me feel that my work was worth something and that my results were appreciated. If I managed to do something special or respond in a different way from my colleagues I was praised in front of the class. This kind of rewards made me feel appreciated but also a little ashamed of my colleagues because I did not want to be perceived as arrogant."*

#### **12. C.V.**

*"If I try to think about it I can hardly remember some situations when I was rewarded for a good deed. My parents taught me that for good deeds I should not expect a reward because this is normal behaviour and I should not do something expecting something in return at the end. I was taught that if I do not behave I will be punished. I guess the lack of punishments was some sort of reward for my good deeds. The rewards I got in school were usually verbal encouragements from teachers. They had an effect upon me because they made me feel proud and confident."*

#### **13. P.L.**

*"I was not rewarded for good marks in school or for normal behaviour. The most influential rewards were the verbal encouragements I received from my parents for helping them. Summer camp was a reward. The most important reward for my efforts in school was recognition of my good behaviour and good results in front of the class."*

#### **14. T.I.**

*"Material rewards have been an incentive for me to accomplish something because I have been spoiled as a kid and I got everything I wanted. This did not help me too much because I am dependent on my parents and I am afraid to leave the nest. I like to hear praises addressed at me. Most of the time they are my favourite rewards because they are rarely objective. Anyway, soulful rewards are the most important. I think that if I can't do a job properly it's better to not do it at all. When I managed to do something and I was praised they made me feel really confident."*

**15. A.B.**

*“The long awaited volleyball I got from my mom – for winning a juniors’ championship. All the girls in the team wanted that ball so I was very glad I got it and I wanted even better results. Praises from the maths teacher because I got the highest mark at the baccalaureate. I felt proud and content with my work and it made me want even better results.”*

**16. D.J.**

*“When I got first place in a dancing contest my mother got me a laptop. I was very happy because I wanted it very much and she kept her word. When I started dancing I got the moves right from the start – the moves that the others have known for a very long time. The teacher praised me in front of my parents and dance colleagues. I was very proud of myself and I worked a lot, especially so that I could show them that the teacher was right. When I got the Baccalaureate my mother let me go to the seaside alone with my girlfriends. I was very happy that I managed to make my mother happy.”*

**17. R.A.**

*“Talking about rewards, my parents have insisted on immaterial rewards (praise, appreciation etc.). I was rewarded for doing the right thing and for getting diplomas in school. They made me feel good, appreciated and understood. It influenced me in a positive way and helped me progress and try to be on my best behaviour. As a reward in school I got prizes for good results every year and for school Olympics contests. They made me feel like a winner, I felt they demonstrated my ambition and capacity to fight for what I wanted. I was very happy for the diplomas and the books I got because I felt I have worked hard for them and I deserved them. They have influenced me in a positive way and determined me to fight for a prize but on the other hand sometimes I feel I have focused too much on diplomas and less on school and extra-curricular activities.”*

**18. N.S.**

*“My parents rewarded me for the high marks or for good deeds with gifts, sweets or praises. Rewards have helped me grow, be more responsible, show respect and understand that by working I can get anything. In school rewards were high marks that I got and that transformed me in a competitive person. Praises from teachers made me feel important and the fact that they*



*called me smart, quick learning and with high objectives made me feel proud of my qualities and determined me to be better.”*

**19. A.W.**

*“Appreciations in the form of praises or hugs have constantly been present in the success moments for which I have worked hard. Although these have made me feel appreciated and confident in myself I have noticed that in time the effect was almost reversed. I have become so convinced that every time I was faced with problems I will manage that when I happened to fail I was affected from a mental point of view. Noticing what was happening, my mother changed her tactic and decided to reward me for greater efforts. This way usual appreciations have turned into rarer ones, associated with external stimuli. For example, in school years and especially during puberty I was offered a gift for high marks at the end of every class. I felt much more motivated to work and final recognition brought me a lot of satisfaction. This change affected my perception of myself. I learned that it is normal to have limits and have failures but what matters is to win the final battle.”*

**20. A.A.**

*“There were no rewards in our family. It was something normal to learn and be a good child. I was always among the first and I did not make problems for my parents. The gifts I received from them have never been as a reward for good deeds. In school I have received a lot of praise for my high marks. I have taken part in contests and Olympics where I successfully represented our school. Every mark and every appreciative word from the teachers made me work even harder in order not to disappoint them. Because I was always among the first in results in time I started to react inappropriately to critics. During high school my mother has realised this. I was attending private tutoring in order to get prepared for faculty. The teacher I had was very severe and kept criticising me. I was discouraged and started to get low marks. I simply stopped learning! Then suddenly he started to encourage me and even praise me. As a result I started to learn and get good grades. Years later I found out that his change in behaviour was determined by my mother – she talked to him and explained that if he was not encouraging he was blocking my learning.”*

**21. H.B.**

*“I was a model pupil in school and I learned all the time and had good grades. I had the best performance in school and I was passionate about drawing. I had a lot of rewards throughout the years: high grades, teachers’ respect, admiration from my colleagues and a new social standing in school. Everybody was counting on me, starting with my colleagues who were asking me to help them with their homework and tests, and ending with my teachers who praised me and respected me. But there was also the physics teacher who was always testing my patience and my memory in front of the class. I felt a huge responsibility on my shoulders and it made me feel it more like a punishment than a reward. Out of the blue someone asked me to help and I could not refuse. I cannot say I did not like the feeling back then. But trying to help others I was wearing myself out! In time I realized that my friends were just driven by interest.”*

**22. V.V.**

*“The most used rewards in my family were praise and encouragement. I have learned to cook by talking on the phone with my mother. She explained what I had to do and she encouraged me. It was really important for me to know that she supported me and that she would not scold me if I made a mistake. In school I have had my share of rewards, such as praise and encouragement. This has always motivated me to learn and get good marks.”*

**23. J. N.**

*“Mostly the rewards in school have been expressed through marks, which have stimulated my desire for self-perfection and recognition in front of the others. The good marks I got made me feel relieved because the things I have done did not go unnoticed. At the same time a huge reward in school was my teachers’ recognition. They have compensated their behaviour in primary classes with the nice words and praises. Also, the only material compensation that I got from my family was at the graduation from secondary school when my parents sent me for the first time on a trip abroad. In the family the main rewards were recognition, affection and trust. Thus, when I was successful and I did a good job, the trust my parents had in me grew up to the point when they allowed me to do what I wanted because I had their credit.”*

We can see from the above interviews that most rewards have to do with activity and performance in school. The rewards of the interviewed people have been firstly as good marks, prizes, diplomas and as a consequence the rewards in the family followed, like money and small gifts – mobile phones, clothes, trips, laptops etc. We can see that for some of them praise is a very important form of appreciation for their work. The biggest fear was not to disappoint their teachers and parents. A very important reward was making their parents happy, and especially the mother. One of the interviewed persons mentions that the reward proves you can get anything you want as long as you work hard and it makes you more ambitious, but she admits that wanting so much to get compensated is not in the best interest of intrinsic motivation. They want to be praised because this confirms them that what they do is alright. They need to be appreciated and respected, they need support and encouragement because this is what makes them go on, as they say in the interviews.

## **Conclusions**

I think that before we become “examples” in distributing rewards and praises in children’s education we should first ask ourselves what kind of adults we want to educate. What kind of educational results do we want? Do we want to form some obedient, humble, subservient person, dependent on the approval and appreciation of others or do we want autonomous, independent, responsible people with a good image and positive self-esteem?

Rewards have a precise purpose and they focus on extrinsic motivation: if you do this, then you get this! The use of rewards may not be beneficial to children, in the idea that they will end up doing certain things, taking on certain activities, engaging in certain relations only if they get something in return. Otherwise they will become unattractive, worthless and they will have no interest in engaging in certain tasks or getting involved in certain relations. The absence of reward will make them lose motivation and give up on a task or a relationship.

The frequent use of rewards will diminish significantly the intrinsic sense of responsibility, judging everything through the win-lose filter. When they do not get something in return they lack the motivation to do a certain thing. Also, as children grow up, they will lose the interest in certain actions if the rewards are not multiplied or are not more stimulating.

In conclusion, we will be forced to use even more rewards, to praise as much as possible, if we want to keep motivation running for the children and get them to accomplish what we want.

Rewards represent a positive conditioning of children’s behaviour to the standards imposed by the parents and teachers. Praise and reward is the

way that adults control and manipulate the behaviours and thinking of children.

The focus is on control and not on the relation! This is a vertical relation, one of power between the child and parent / teacher: “I know what is better for you”. Through the standards imposed by parents and teachers, the child will always feel judged and evaluated and will make all the efforts to impress his teachers and parents, to make them happy and to receive the praise, appreciation and approval from them.

This way we create for them behaviours dependent on approvals, appreciations and recognition of others. This way we “help” the children become dependent on high marks, awards, diplomas, certain people, social status etc. Their esteem and self-image will be regulated just according to what others are saying and thinking about them.

Children will do certain activities not for themselves and their own joy or contentment, but in order to please others. They will become dependent on the opinions of parents and teachers, they will find it very hard to take decisions on their own, because their self-esteem will be affected.

In the case of a failure (low grades, not passing an exam, losing a contest, failing a relationship etc.) they will lack motivation, will be demoralized, depressed, will lose their interest in studying. By rewarding them the focus is put on what the children do and not on what they are and what they feel!

It is already known that children have an intrinsic need to explore, to experiment, to know a lot of things and to learn what is new. This need becomes blocked and suffocated by the system of rewards used at home and in school.

Also, praise makes children dependent on the person that is praising them and generates the belief that “justifies” the preoccupation for reward. It focuses on the result and not the effort! Those who become dependent on praise do not get engaged in a task unless they “get something” or they are “seen or heard” by somebody.

We need to develop intrinsic motivation in children – it is the fire that needs to keep on burning! Children need to be supported and helped to understand that not everything they need to do will be easy, but that with effort and perseverance it will not be impossible, and effort is needed in any activity or action.

Also, educators must take into account the needs of the children (to be respected, heard, seen, understood etc.), their capacities, abilities and resources and the need to be offered an alternative, to be encouraged to find a solution, to cultivate their empathy, patience, generosity etc.

It is very important in the educational process that we focus on encouragement – it helps in the development of intrinsic motivation.

Encouragement focuses on the learning process and not on the result or performance. Encouragement underlines the effort and it represents a continuous self-evaluation – what was or was not good, where he must work some more, what he must do in order to evolve, how did he feel during the learning process etc.

This thing helps children break free from the way in which they are approved or appreciated by others. “Children must be able to operate corrections and adjustments based on their own evaluations.” (Faber 2008:168). In this case children do not feel let down if they are not validated by others.

I think it is very important to develop in children the intrinsic joy of their own actions or relations. They must be helped to focus on the contentment and fulfilment that come from their own activities or relations and to understand what their proper finality is.

I consider that only by accessing their intrinsic motivation children will be able to mobilize their entire resources in order to reach their full potential and this way they will become healthy adults from an emotional, social and physical point of view.

## References:

- Agabrian, M. (2003). *Sociologie generală*. Iași: Institutul European.
- Faber, A. (2008). *Comunicarea eficientă cu copiii acasă și la școală*, București Editura Curtea Veche.
- Kohn, A. (2013). *Parenting necondiționat – de la recompense și pedepse la iubire și înțelegere*, București:Editura Media Est Publishing.
- Kohn, A. (2014). *Pedepsiți prin recompense*, București: Editura Media Est Publishing.
- Kohn, A. (2014). *Mitul copilului răsfățat*, București: Editura Herald.
- Kohn, A. (2015). *Mitul temei pentru acasă*, București: Editura Herald.
- Skinner, B.F. (1971). *Revoluția științifică a învățământului*, București: Editura Didactică și Pedagogică.
- Thornidike, E.L. (1983). *Învățarea umană*, București: Editura Didactică și Pedagogică.

## IN-SERVICE AND PRE-SERVICE TEACHERS' PERCEPTION ON CYBERBULLYING

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**Abstract:** *A fundamental resource in educational programs for preventing and combating cyberbullying are the teachers. Although cyberbullying can happen anywhere in the virtual environment, the formal educational environment is conducive to preventive interventions for all pupils of a class (Wölfer, R., Schultze-Krumbholz, A., Zagorscak, P., Jäkel, A., Göbel, K., & Scheithauer, H. (2014) Based on these prerequisites, we have carried out a study on the in-service and pre-service teachers enrolled at "Aurel Vlaicu" University of Arad, aiming at: identifying how teachers understand concrete manifestations of cyberbullying and recognize a victim-student of cyberbullying, identifying the role of responsible persons in preventing and combating this phenomenon, identifying solutions to combat cyberbullying, identifying the training needs of teachers in the field of prevention and combating cyberbullying. The results shown that the teachers have a non-nuanced representation on the phenomenon of cyberbullying, they stressed the need for training on the topic and considered that parents are the main responsible for children education as regarding safety in virtual environment. The study also highlighted that the phenomenon of cyberbullying is the problem of the whole society, and its solving cannot be left to the sole responsibility of a single institution / factor: "Combating cyberbullying is a current issue that should be debated by each of us. The involvement of everyone is very important. "(V.D).*

**Keywords:** *cyberbullying; identifying cyberbullying victims; teacher training; intervention programmes;*

### Theoretical premises

Cyberbullying is a concept hard to define clearly even by people already working or preparing to work in the educational environment. There are no coherent policies and programs at national level to train in-service and pre-service teachers to recognize, to prevent and fight against cyberbullying among young people. Measures are left to the interference, sometimes unprofessional, of parents, friends, colleagues, etc.

Intimidated by what is happening to them, young people often avoid asking for help from parents, teachers, or a qualified adult. Consequences are often dramatic: decrease in learning outcomes, isolation, self-mutilation, depression and not isolated, suicide.

A fundamental resource in educational programs for preventing and combating cyberbullying are the in service-teachers and students enrolled in teacher training programmes for all educational levels (preschool, primary, lower secondary and upper secondary). Why them? Because they are close to pupils' age, they use the electronic means of communication and information themselves, they are very active in the virtual environment, and some of them certainly have experiences related to cyberbullying, either as a victim or as an aggressor. Another important category is represented by the experienced teachers who find themselves powerless in the face of aggression situations in the virtual environment, preferring to (sometimes) ignore the atypical behavioural manifestations of bullied students in the virtual environment and choosing to focus on the contents of the school curriculum.

Starting from this context, we intend to carry out a **diagnosis study** that aims to identify the perception of current and prospective teachers about the phenomenon of cyberbullying.

**The specific objectives** of the research were:

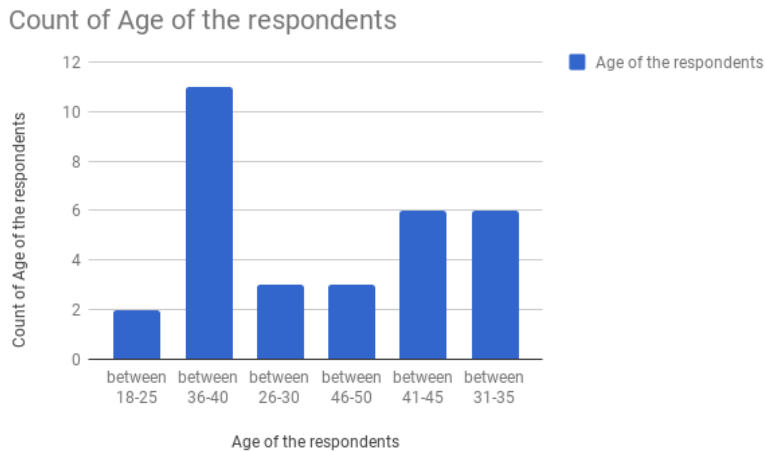
- to identify how teachers understand concrete manifestations of cyberbullying
- to identify the extent to which teachers can recognize a victim of cyberbullying
- to identify the extent to which teachers assume the role of responsible persons in preventing and combating this phenomenon
- to identify solutions to combat cyberbullying
- to identify the training needs of teachers in the field of cyberbullying. prevention and intervention.

**The hypotheses** we wanted to test were:

1. Experienced teachers will more easily recognize the signs of acyberbullying victim compared with pre-service teacher students
  2. There is no clear understanding of all aspects of cyberbullying.
  3. Teachers assume little responsibility for educating children to deal with cyberbullying
  4. There is a real need for teacher training on the phenomenon of cyberbullying
- The survey was conducted in July 2017 using the questionnaire survey method.

The questionnaire was applied to a **sample of 32** in-service and pre-service teachers, current and former students of "Aurel Vlaicu" University of Arad. The research environment was online, the questionnaire being promoted in virtual groups of former or actual students of the Teacher training programme, who have completed it voluntarily, without sampling, assuming that subjects interested in cyberbullying have autoselected themselves. It turned out to be 90% of women, 10% of men.

Regarding the independent variable "age" , one-third (33.33%) of respondents were between 36-40 years, 20% between 41-45 and 20% over 45, as can be seen in figure 1



*Figure no.1. Respondents distribution after “age” variable*

Analyzing the age of the subjects, their work experience and bachelor specialization, we find that 63% of the subjects have over 10 years of professional experience as teachers, most of them being teachers for primary and preschool education, as shown in the lower graphs



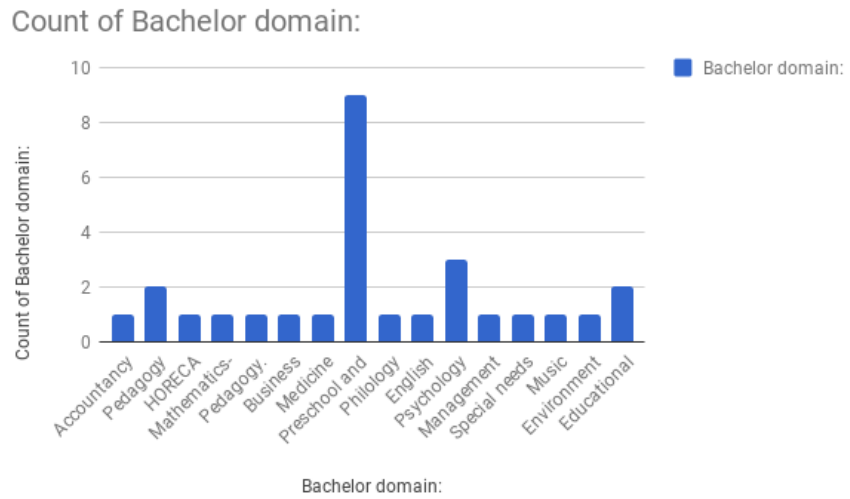


Figure no.2 Bachelor specialization domain of the respondents

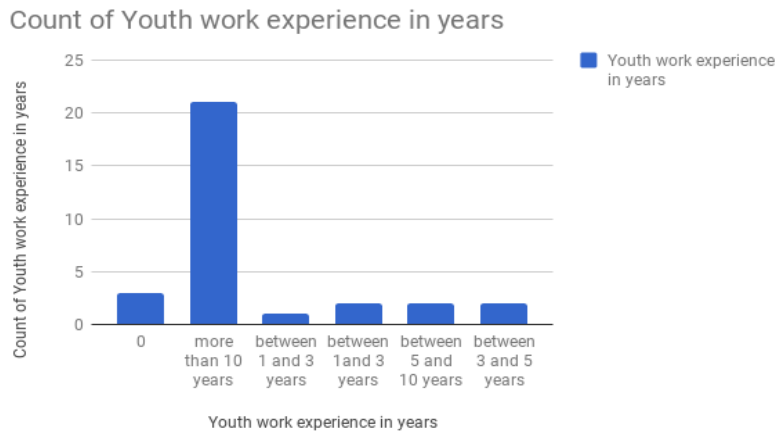


Figure no.3. Youth work experience of the respondents

Only 20% of respondents do not have or have little experience working with young people. Research has shown that these experienced respondents are attentive to the children's manifestations, 73% acknowledging that they have heard of the term cyberbullying. When they explain what cyberbullying mean to them, 50% of respondents associate it with online harassment and aggression, and other details of the concept such as: spreading false information, verbal violence, mockery, threats, blackmail, intimidation, referral messages or images with offensive content and even terror in order to cause discomfort, defamation. At the item where the subjects of the study were faced with the possibility of choosing the meaning of the concept of bullying based on predefined answers, the elected items indicated the following:

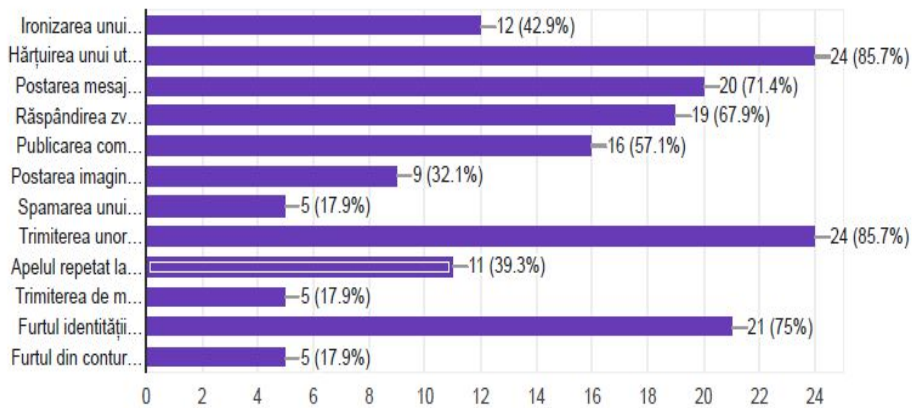


Figure nr.4-Multiple choices option for defining cyberbullying

We find that for 85.7% of respondents cyberbullying means "harassing a user in an instant messaging session" and "sending out threatening emails", so harassing through written, defamatory language. The theft of a user's virtual identity and posting on his behalf gained 68% of the vote, with high scores (71.4%) and also "getting the disturbing Message Post on the facebook page". The fewest choices were received by the variables "spamming of an email account", "trespassing of unsolicited text messages to another user" and "the theft of a user's bank accounts". These manifestations are not as strongly perceived as cyberbullying because both prevention and intervention mechanisms (anti-spam filters, unsubscribe, lock-out, legal sanctions) are available for both spamming and money theft while for cyberbullying, prevention and intervention mechanisms are not so clearly defined.

### Cyberbullying identification

When it comes to recognize the cyberbullying manifestations among the victims, teachers mainly mention the internalization of the child- victim's behaviour. This "withdrawal" is accompanied by agitation, stress, fear, anxiety, rejection. The child victim of cyberbullying loses interest in school, the school performance decreases and the victims are often disciplinary sanctioned with the decrease of the grade for school behavior due to absences. The victims avoid communication with colleagues and teachers and do not want to talk about similar cases. The students become panicked, have no confidence in the actions they take and most of the time they refuses to talk about the problems they have in the online environment. They are irritable, fearful and panicked because they feel fooled, harassed or threatened. They often manifests a low self-esteem. At the same time, to the question: "How many victims of cyberbullying have you encountered so far?" nearly 60% of respondents say they do not know a case, so their recognition of cyberbullying victims is rather a hypothetical- theoretical one.

Histogram of How many cyberbullying victims you have met until now?

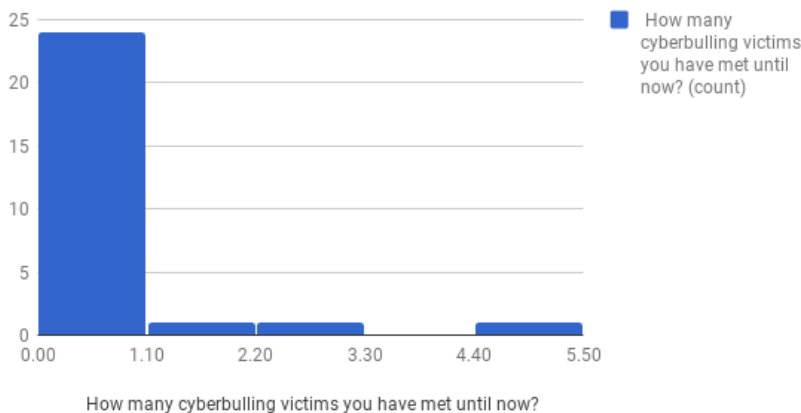


figure no.5. The number of the met cyberbullying victims

### Intervention

Analyzing the subjects' responses to how they intervened when they identified victims of cyberbullying, we find that they refer to direct communication with the child victim, parental notification and counseling and communication with qualified factors such as psychologist, police, Child Protection, Site Administrator, etc. When it comes to cyberbullying intervention and prevention programs, respondents believe that they should

be made by competent, skilled and experienced people in this area. More respondents have emphasized the importance of counseling by an expert during the counselling hours and not only. The analysis of real cases, the presentation of the situations of victims who have managed to get rid of harassment are other proposals for combating and understanding the phenomenon.

Other interesting intervention suggestions referred to Consumer Social Networking, Safe Net, Limited Site Access, Limited Program Access, Supplier Deontology.

An effective cyberbullying intervention program should also include young people's personal development activities that give them confidence and encouragement to unmask any inappropriate action from the virtual environment. Respondents believe that informing young people should also address the consequences of aggression in the virtual environment and the importance of reporting harassment when they are witnesses.

Some respondents even propose inclusion of cyberbullying themes in the national curriculum in order to enable students to recognize and respond to harassment and intimidation.

Partnership between school, family, NGOs, public institutions, the media is considered fundamental for the achievement of effective educational programs.

Creation of a support network for students and teachers is another important point of an intervention program highlighted by research subjects. This network would aim to:

- Provide support for teachers to recognize and respond appropriately to online violence.
- Increase the capacity of school counselors to address issues such as harassment, discrimination, violence.
- Creation of a support system for victim students.

Teachers also agree with closer monitoring of children's access to the Internet by accessing and controlling suspicious websites by authorized adults, limited access to Facebook and other online resources, identifying the aggressor, deleting suspicious site blocking comments.

Family counseling sessions to increase parental and child communication would provide preconditions for early family avoidance or intervention in the case of child aggression in the virtual environment. The most synthetic answer given by a respondent refers to an intervention program that leads to:

- Accountability
- Liability
- Information

- Determination
- Involvement

The question of assuming responsibility for preventing and combating cyberbullying confirms our assumption that teachers are not considered themselves to be the main responsible for safety education in the virtual environment. All subjects were totally in agreement that parents should be educating the child about the phenomenon of cyberbullying. Half of respondents said the psychologist and police have the responsibility to prevent cyberbullying. Responding teachers have somewhat agreed 75% that teachers are generally responsible for educating on cyberbullying, especially the master teacher who, in their opinion, has this role. Respondents are somewhat agreeing 40% on the importance of relationships between same-age friends as a means of preventing and combating cyberbullying.

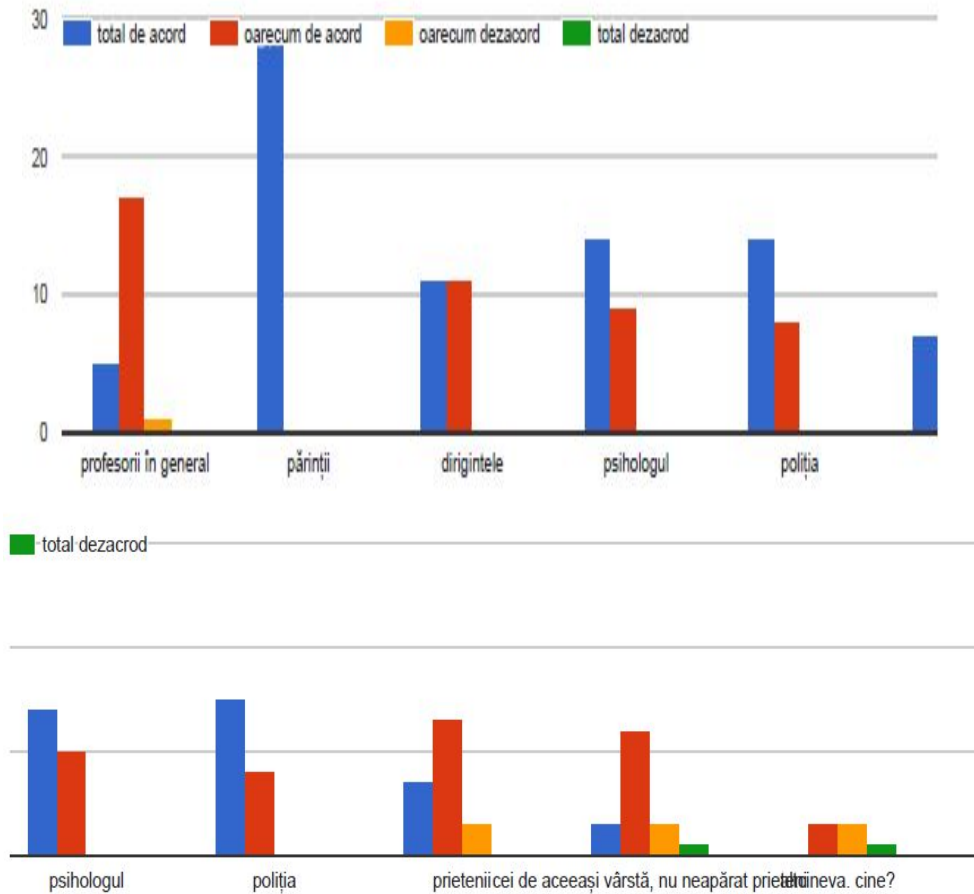


Figure no.6. Agreement and disagreements towards the stakeholders that should action in for cyberbullying prevention and combatting

The explanation that teachers place responsibility on children's education for internet safety to parents may be that teachers feel unprepared to cope with the challenge of cyberbullying among students. This is evidenced by the percentage of 90% of respondents which consider to a great extent that teachers need training on identifying and combating cyberbullying.

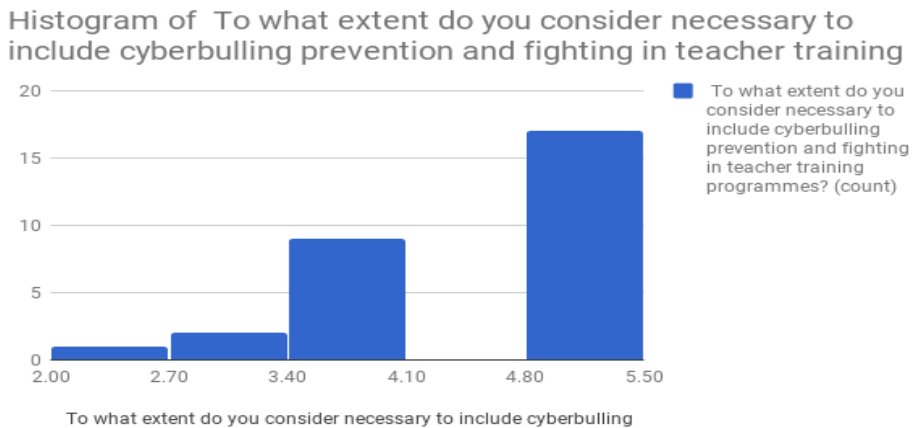


Figure no.7. Extent of training needs of the teachers in the field of cyberbullying (5 means-to a very large extent; 1 means –to a very small extent)

Subjects' preference goes 43% to open-learning courses, with only a quarter of the subjects favouring face-to-face courses, and 16% prefer individual study.

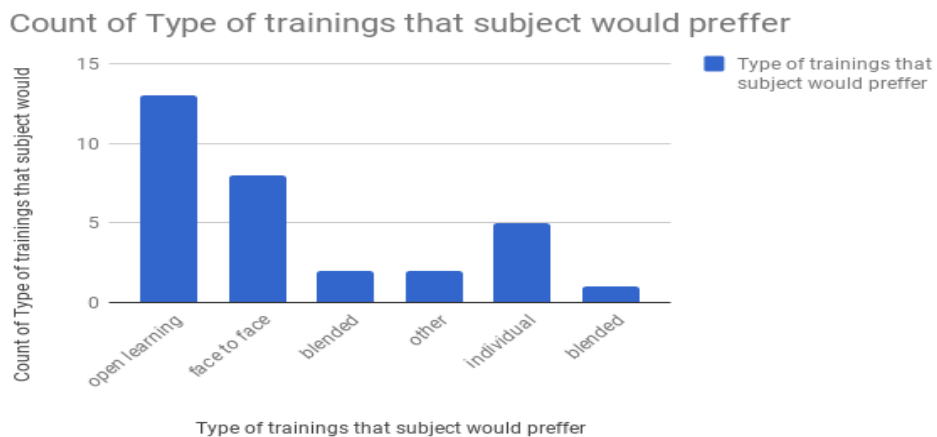


Figure no.8 –Types of trainings the subjects would prefer

Why teachers (a category that traditionally prefers face-to-face courses)prefer open-learning courses, is the subject of another research. We

can see that flexibility, the ability to be followed at own pace, interactivity, gamming, access to other resources, connection to the latest scientific and methodological news are some of the features of open learning courses that make them attractive to active learners on the labor market, who can not easily follow face-to-face courses. Of those who opted for face-to-face courses, 77% would attend the "Aurel Vlaicu" University's training, second in the order of preferences being the Teaching Staff House.

Although generally open questions do not receive as many responses as closed ones, 45% of respondents considered it important to point out some aspects of cyberbullying. Their opinions highlight the fact that cyberbullying is a challenge of a constantly changing world, which we, as teachers and parents, need to adapt to. Subjects said that cyberbullying "is a sensitive subject for those who have been or are being put in this situation, and serious treatment by specialists can lead to increased confidence among cyberspace users, not to conform and / or suffer silently. "

One subject of research recognizes that "... it happened to me at a time when I was vulnerable. It was terrible, but I had support from family, close friends, and even from authorities. "

In the virtual environment, the boundary between the victim and the aggressor is often unclear. "I think everyone is affected by cyberbullying to a greater or lesser extent and this phenomenon is impossible to stop. An information and knowledge of this phenomenon can avoid the magnitude of situations" .

## **Conclusions**

Without any claims of representativeness, the study shows that current and future Arad teachers are aware of the problem and extent of cyberbullying among students.

Hypothesis no.1. Experienced teachers are more likely to recognize the signs of a cyberbullying victim compared to future teacher students, is not confirmed because there is no significant difference between the behavioral indicators described by experienced and novice teachers.

Hypothesis number 2. There is no clear knowledge of all facets of cyberbullying, it is confirmed because the definitions developed by the respondents emphasize primarily the aspect of text -based harassment and less other aspects such as spamming, theft of virtual identity, and so on.

Hypothesis number 3. Teachers assume little responsibility for educating children to deal with cyberbullying, it is fully confirmed, because 100% of respondents strongly agree that parents have a responsibility to identify and prevent cyberbullying.

Hypothesis 4 There is a real need for teacher training on the phenomenon of cyberbullying, is fully complied with by 90% of respondents who confirm this need.

The phenomenon of cyberbullying is the problem of the whole society, and its solving can not be left to the sole responsibility of a single institution / factor: "Fighting cyberbullying is a current issue that should be debated by each of us. The involvement of everyone is very important." (V.D).

Teacher training from the perspective of identifying and intervening in the case of cyberbullying is a need cleamed by teachers themselves and by the growing number of aggressors and victims in the virtual environment. Although cyberbullying can happen anywhere in the virtual environment, the school educational environment is conducive to preventive interventions for all pupils of a class (Wölfer, R., Schultze-Krumbholz, A., Zagorscak, P., Jäkel, A., Göbel, K., & Scheithauer, H. (2014) It remains to be seen to what extent traditional institutions providing initial and in-service teacher education will be able to provide relevant, interactive and open programs for the benefit of society as a whole.

#### **References :**

- Eden, S., Heiman, T., & Olenik-Shemesh, D. (2013). Teachers' perceptions, beliefs and concerns about cyberbullying. *British Journal of Educational Technology*, 44(6), 1036-1052.
- O'Moore, M. (2000). Critical issues for teacher training to counter bullying and victimisation in Ireland. *Aggressive behavior*, 26(1), 99-111.
- Li, Q. (2008). Cyberbullying in schools: An examination of preservice teachers' perception. *Canadian Journal of Learning and Technology/La revue canadienne de l'apprentissage et de la technologie*, 34(2).
- Craig, K., Bell, D., & Leschied, A. (2011). Pre-service teachers' knowledge and attitudes regarding school-based bullying. *Canadian Journal of Education*, 34(2), 21.
- Wölfer, R., Schultze-Krumbholz, A., Zagorscak, P., Jäkel, A., Göbel, K., & Scheithauer, H. (2014). Prevention 2.0: Targeting cyberbullying@ school. *Prevention Science*, 15(6), 879-887.



## SOCIAL WORK AND SEXUAL EDUCATION IN SCHOOL

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**Abstract:** *Sexual education in schools is a matter of first importance in our country, considering that statistics show that every year one hundred thousand young girls make an abortion and there are a million sexually transmitted diseases every year. Therefore, for a good physical and mental health of the new generation, adequate sexual education is required, especially in high schools, which involve an interdisciplinary team: school physician, school psychologist, social worker. The paper makes a study on adolescent information levels based on a 20-question questionnaire applied to 100 high school students aged 15-19, girls and boys. The questions of the questionnaire refer to the level of sexual education of the young, the relationship with parents (in relation to sexuality), the way the school engages in this education, the responsibility and the level of satisfaction of the teenagers for the interest shown by the parents and the professors/education system on this issue. The results obtained in the questionnaire make us think that setting up counseling centers on sex life issues could clearly contribute to improve the future social and family adaptation of adolescents, leading to a decrease in the number of abortion and divorces over time.*

**Key words:** *adolescents; responsibility; sexual counseling; sexual education;*

### **Theoretical frame**

Considered one of the most tumultuous periods of life, adolescence offered a very complex study material. Adolescence is the age at which the individual has to take their lives in their own hands. As a continuation of puberty, it raises the problems of the previous stage to a higher scale. It is the age of the greatest performances, the energies being fully released.

The needs of the teenager are, on the one hand, generated by the needs they feel from the new perspective they are in, but there are other needs that have evolved from earlier times and have acquired a new form

due to the new situation in which the individual is. The needs of the teenager take on a number of forms such as: the need for creativity with social value, affective reciprocity, the need to share feelings, the need for elective friends.

The social, economic and cultural differences influence the relationships between parents and children, the communication between them, the skills and the capacities of the relationship, the need to know the social and individual evolution of the teenager. The "parent profession" is an extremely difficult, demanding and dynamic one. Parents play a decisive role in acquiring the sense of stable and lasting identity. It has been found that adolescents who are less well-adapted and present a wide range of psychological problems have been the subject of parental rejection rather than acceptance and love.

Adolescence is a period of major changes, each of which produces a source of stress, the adolescent's famous crises, or various behavioral disorders. All these transformations, which arise as a result of development during this period, prepare the teenager to experience new types of behaviors. This experiment leads to risk-taking behaviors which, within certain limits, can be considered as a normal component of adolescent development (Moldovan, Balas-Timar, 2010) contributing to: defining their own identity, testing new skills, exercising decisional autonomy, developing the realistic self-evaluation capacity of one's own person, gaining respect and acceptance from the group of peers (Modrea, 2006).

Generally, adolescents take risks, but they need guidance and counseling to guide risk behaviors towards more constructive and less dangerous behaviors. The more he matures, the better he learns how to realistically assess the risk and modify his behavior based on perceived risk.

However, there are times when many of the risks posed by adolescents may pose real threats to their physical and mental health. This includes pregnancy, drug and alcohol abuse, smoking, as well as accidents involving various vehicles and devices (cars, bicycles, skateboards etc.). In the case of adolescents who constantly engage in risky behaviors, this fact may signal a deeper problem (Dinca, 2004).

Regardless of the society in which they live, children consider their parents responsible to meet their wishes and needs, to ensure their successes or their failures. Relationships between parents and children are based on a special, socially filtered communication mechanism, in which a particular pattern, a pattern of conduct is achieved. Within these relationships, parents try, and often many of them succeed, to ensure the socialization of children, to contribute to the modification and improvement of the interrelation style developed in childhood (Verza, 2000).

If, during childhood, parents are the ones who effectively initiate the child in establishing family relationships, then extended to the playgroup,

during adolescence, parents fail to supervise the teenager only with great difficulty. In childhood purchasing toys, nutrition, cleanliness, conversation is the exclusive benefit of the adult. Parents speak and transmit enormously to the child during their little childhood; in turn, they actually learn to talk, to engage in dialogue with their child.

Children ask questions that parents should try to answer and provide answers as appropriate as possible to the child's mental development. In adolescence, young people aspire to a status other than the "child": in their turn parents need to learn what and how to communicate with their son or daughter (Golu, 2015).

#### *Implications of poor communication*

When children are rejected by their parents, they dramatically increase their chances of evolving into puberty and adolescence towards delinquency, aggression, neurotic behavior, atypical behavior and, at the same time, their chances of turning to civilized behavior, being friendly, having civilized behavioral abilities, being cooperative, caring for others etc. are much lower (Hoyle, 2014).

During this period, the teenager faces the issue of sexual choice. R. Driscoll et al. (cited by Popa-Velea, 2013) studied the consequences of parents' intervention in order to control the love affections of their children and call into debate the so-called „Romeo and Juliet effect”. Non-acceptance of parents for adolescent choices may cause different reactions:

- Submission to the desire of adults and renunciation of a heterosexual choice: manifests shyness and inhibition of the opposite sex.
- Family Breakup: early marriages of youngsters escaping from an aggressive, anxious family environment.
- Choosing a partner according to the parents' image: the boy chooses a maternal wife in front of whom he gives up his responsibilities, the daughter falls in love with a seducer of his father's age.

Parents should know to engage and address with all responsibility these affective delicate periods that teenagers cross over to give them real help. This task is all the more difficult, as the teenager, pudic, considers any attempt of dialogue as an abusive interference in his intimate problems .

Development during adolescence is strongly marked by biological factors. From this point of view, biology offers the "physical" mechanism, and the hormonal factor offers the predisposition to act sexually. However, it is the social factors that give the outline of sexual behavior. There are three main areas where socialization of adolescent sexual behavior occurs: sexual identity, parental influence and the influence of those of the same age (Fodoreanu, 2004).

*Sexual identity.* This is one of the most important factors in socializing sexual behavior and acquiring gender identity. It refers to features such as

masculinity and femininity; the roots are found in childhood, but their manifestation is plenary in adolescence, when adolescents learn about gender identity through the media, school and, most importantly, the parents and family they belong to.

*Parental Influence.* Parents express their own sexual attitude indirectly, by way of example of their own behavior, or in the context of wider aspects. In families in middle classes, parents are aware of principles such as self-control, restraint, and postponement of gratification in general. For young people in families with a better economic and educational level, the probability of engaging in sexual intercourse at an early age is lower (Galimard, 2015).

*Influence of the same age group.* The influence of the group is one of the stronger forces behind sexuality in adolescence; the group provides information and values that are transmitted through group culture (Moldovan, Bălaș-Timar, 2010); In a survey conducted among adolescents, they were asked why they did not wait until they were raised to engage in sexual intercourse. Their answers point to several key motivations, with direct reference to group and group culture.

In summary, the socialization of adolescent sexual behavior is a learning process in which their own sexual identity, the parental influence and the influence of those of the same age interfere. Each dimension of sexual socialization goes through a complex process of training within a complex system of attitudes and behaviors, social standards and the requirement to comply with them (David, 2014).

## **The research**

The research made is a pilot research aimed at establishing the level of adolescent knowledge related to life and sexual relations, as well as the relationships of young people with their parents and their attitudes towards certain aspects and consequences of sexual life. Depending on the results, the usefulness of setting up special sexual counseling rooms, where adolescents can discuss these aspects of life, with professionals (social workers, psychologists, doctors, etc.), is proven or not.

### *A. Hypothesis*

The starting hypothesis was the following: If we know the level of knowledge about sexual life, of the adolescents then appropriate measures can be implemented to avoid increased risks in this area.

### *B. The lot in the study*

In order to verify the research hypothesis, it was decided to study one class each year of high school. In total the lot numbered 100 subjects, 9th to

12th grade students, from "Vasile Goldiș" High School in Arad, 43 boys and 57 girls.

## **Working methodology**

### *A. Methods*

It was built a questionnaire consisting of 20 questions. Questions had predetermined answers, but a number of 3 questions left a response ("others") where the subjects were able to offer other variants that were did not include in the questionnaire or give some explanations. Questionnaire questions related to aspects of sexual life, teenagers 'knowledge of it, their relationships with parents, adolescents' attitudes to questions asked, their sources of information etc.

### *B. Conducting research*

The questionnaire was applied in the morning, during the hours provided by the teachers and the school's direction. The subjects were asked to respond with the highest degree of sincerity to the questions of the questionnaire, ensuring their confidentiality. To ensure greater sincerity, confidentiality was also ensured by the fact that the names of the subjects were not required, but only age, sex and class. In this way, it was hoped to get as honest as possible answers that would not be influenced by the phenomenon of social desirability.

The questionnaire operator was permanently present during the questionnaire completion, being prepared to provide explanations and guidance to adolescents in cases where the questions were not correctly understood. Once the questionnaires were completed, the results were processed and the subjects' answers were synthesized in tables and graphs. Subsequently, they were interpreted in the light of the literature and the theoretical context previously set out.

There were no cases in which the questionnaire was refused, although there were cases when the subjects did not answer to one or more questions. These cases were also included in the processing of results, under the heading "do not respond" and their interpretation was attempted to understand the motivation of the absence of answers from the subjects.

## Results and discussions

Most adolescents discussed at least once with one of the parents about intimate relationships (see Table 1 and Fig. 1).

**Table 1. Discussing intimate relationship with parents**

	Yes	No
<b>9th grade</b>	<b>16</b>	<b>6</b>
<b>10th gade</b>	<b>18</b>	<b>9</b>
<b>11th grade</b>	<b>20</b>	<b>2</b>
<b>12th grade</b>	<b>22</b>	<b>5</b>

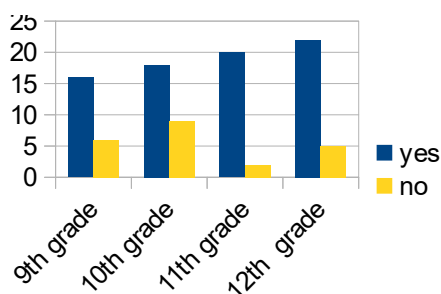


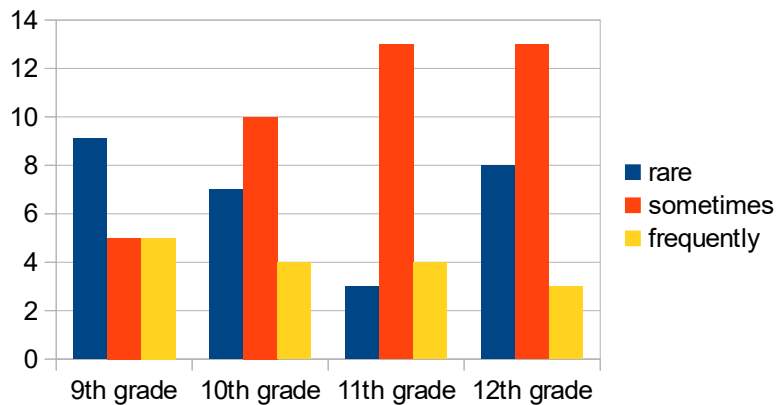
Fig. 1. Discussing intimate relationships with parents

Although the vast majority of adolescents have discussed with one of the parents at least once about intimate relationships, one can still see a difference from the 9th grade to the 11th-12th grades. With psycho-emotional maturation and strengthening of personality traits, adolescents no longer feel "shameful" to talk with their parents about their intimate relationships. In smaller grades (9th and 10th), the number of young people who do not discuss with their parents this aspect of their lives is greater. Perhaps they consider intimate relationships to be a private subject that the parents do not care and at the same time have not yet acquired the easiness of addressing this subject with a mature person. There are some reminiscences from the previous period, when such a subject should not, in any case, reach the ears of the parents.

Frequency of discussions with parents about the intimate relationship is shown in Table 2 and Fig. 2

**Table 2. Frequency of discussions with parents about intimate relationships**

	Rare	Some times	frequently
<b>9th grade</b>	8	5	5
<b>10th gade</b>	7	10	4
<b>11th grade</b>	3	13	4
<b>12th grade</b>	8	13	3



**Fig. 2.**Frequency of discussions with parents about intimate relationships

At all age levels, few are the ones who frequently discuss this subject with their parents (about a third or a quarter of those who discuss the subject). Most of them only talked only sometimes, and the others rare. Approaching the subject probably happened when adolescents had some concerns, or when the parents approached the subject, considering the it is the age at which should be discussed with the children this issue.

Many families still retain the idea and conception of a subject that should not be discussed in front of the children or with them. In addition, unjustified insane embarrassment transmitted to children at so-called "shameful" aspects prevent the establishment of a comradely and continuous relationship between the two generations. This was also reflected in the answers to the next question, on how open the discussions with parents were on this issue (see Table 3).

**Table 3. How open the discussions with parents were**

	<b>any thing</b>	<b>neutral subjects</b>	<b>I'm not talking about it</b>
<b>9th grade</b>	10	11	1
<b>10th gade</b>	10	9	1
<b>11th grade</b>	16	5	1
<b>12th grade</b>	13	10	3

A large number of adolescents (almost half, 49) says they can discuss anything with their parents who are open and understanding. However, an equally large number (41 pupils) of those who answered this question argue that their discussions with parents are limited to neutral subjects that do not refer to their intimate life or do not address the subject at all.

Parents-teenagers relationships have not yet reached a degree of openness and acceptance that is sufficiently convenient for adolescents. Some barriers to the role and status of parents continue to exist today, which is why one third of the subjects do not even want to talk to parents about it.

Thirty-three of the subjects do not want to talk to their parents, instead 64 of them would like to have open talks with them. Significantly, as psychosocial maturation (also reflected in the passage from one cache to another), there is a growing number of people who would like to discuss with their parents about their problems. Ultimately, even if they are not specialists in the field, parents are always close to adolescents, have knowledge acquired through their personal life experience and can answer many of their questions.

The fact that parents, not school, is the source of information for students in this field is also evidenced by the answers to another question, which are categorical when they say that there is no school education program for pupils (Table 4 and Fig. 3)

**Table 4. The existence of sexual education hours in curriculum**

	<b>Yes</b>	<b>No</b>
<b>9th grade</b>	5	19
<b>10th gade</b>	3	24
<b>11th grade</b>	0	22
<b>12th grade</b>	6	21



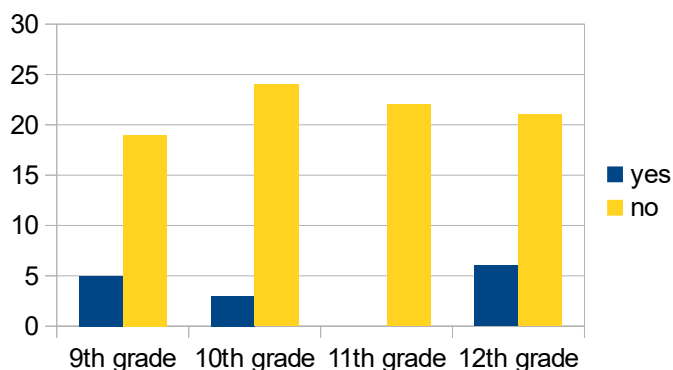


Fig. 3. The existence of sexual education hours in the curriculum

It is clear the subjects opinion about school sexual education hours: these are completely absent. Those who responded affirmatively to this question probably interpreted some topics from biology or conducting classes as sexual education classes. Unfortunately, the Romanian school does not deal with the pupils' life skills (including knowledge about life and sexual hygiene), but, later it can not explain the cases of school dropouts or teenage mothers.

The interest in such information is increased for high school students who, given the multiple biological and psychological transformations in adolescence, need reliable, clear and scientific information explaining the time they cross and its implications. (Table 5)

**Table 5. Interest in hours of sexual education**

	Yes	somewhat	No
<b>9th grade</b>	13	10	1
<b>10th grade</b>	9	15	3
<b>11th grade</b>	12	8	2
<b>12th grade</b>	12	12	3

Many adolescents are interested in introducing such lessons into the curriculum. Those 46 who are very interested can say this because they do not have any information, they have no one to discuss with them, or they want to enrich their knowledge in the field also with the opinion of specialists. Students who are somewhat interested may have some of the information that they consider insufficient, hence their partial interest in this type of lesson. Finally, students who are not at all interested in such classes

either consider that they have all the information they need or do not want to address such a topic that they find embarrassing, especially if the discussions take place in plenary (all class boys and girls) and not separately by gender.

The maintenance of intimate relationships and their frequency are presented in Table 6.

**Table 6. Frequency of sexual relations**

	<b>Never</b>	<b>Rare</b>	<b>Occasionally</b>	<b>Frequent</b>
<b>9th grade</b>	20	10	1	2
<b>10th grade</b>	20	1	4	2
<b>11th grade</b>	8	2	8	4
<b>12th grade</b>	9	2	8	8

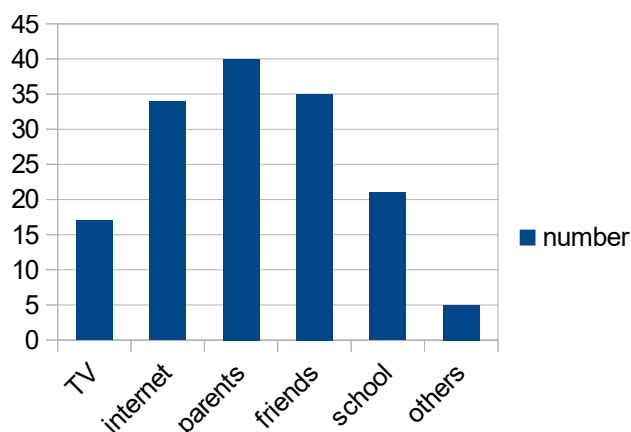
More than half of adolescents (57 subjects) did not have sex until they were questioned, and few of them (16) say they have frequent sexual intercourse. It could be a proof that adolescents are not too concerned with sexuality and still tatters the ground to confirm whether they are happy with this type of relationship and whether to continue them.

The sources of information that teens use are different and vary quite a bit. Most of them use two sources in association (parents and the internet or friends and the internet) (see Table 7 and Fig.4).

**Table 7. Adolescents information sources**

<b>Sources</b>	<b>Number</b>
TV	17
Internet	34
Parents	40
Friends	35
School	21
Others	5

Fig. 4. Adolescents informations sources



It must be admitted, unfortunately, that school is not one of the main sources of information used by teenagers about contraceptive methods. The first three places are the parents (with 40 references), friends (with 35 entries) and the internet (with 34 entries). In most cases, however, two sources of information are used in parallel, as mentioned above.

The school is ranked number four with 21 entries, followed by television with 19 titles. There were also five cases that did not opt for any of the sources of information mentioned in the questionnaire and responded with "others" specifying the books in 3 cases and the doctor in the other two cases. Importantly, young people are trying to document and gather information about a problem that concerns them and interests them. Less commendable is the effort of the school to provide the necessary information for adolescents, leaving everything to parents, friends and the Internet.

In our opinion, the school would be best placed to provide real, scientific information. Information obtained from parents or friends is often based on each person's personal experience or level of knowledge they have. On the Internet, the scientific character of the information is higher, but not all teenagers have computer and internet at home. That is why the role of the school should be much larger and this institution should be more actively involved in the sexual education of the younger generation.

It should also be noted that a very small number of subjects contacted the gynecologist for specialist consultation (6 cases from the studied group) (see Table 8).

**Table 8. Consulting a gynecologist**

	Yes	No
<b>9th grade</b>	2	20

<b>10th gade</b>	0	27
<b>11th grade</b>	1	21
<b>12th grade</b>	3	24

It is gratifying that although they have not always used the methods of protection, although they had more than three partners in their relationships, adolescents studied by us did not face major risks and were required to call a specialist doctor only in 6 cases out of 100 subjects. We are dealing with a positive signal about the personal hygiene of the subjects and the relationships they have maintained.

### **Conclusions**

The research has led to the following conclusions: adolescents generally discuss with their parents the issues related to sexual life. Half of the subjects have open talks with their parents in this regard, the other half prefer neutral talks or not talk to parents at all. Hence the need to set up counseling boards in high schools to provide teenagers with all the information they need and where they are aware that they can talk absolutely with confidence.

Most of the information that teenagers have about sexual life and hygiene comes from parents, friends and the internet. Unfortunately, the information, especially those provided by parents and friends, is not scientific in nature, usually based on the personal experience of the person providing the information. In this way, teenagers often get erroneous information, or perpetuate misconceptions and mentalities which hampers the development and adaptation of adolescents.

That is why many of the subjects still consider sexual life as a topic of taboo discussion, or as a gossip theme. Appropriate counseling by specialists in the field would reduce these impediments and a more realistic approach to sexual life issues.

It must be not forgotten that much of the number of divorces today (a growing number) is due to communication difficulties and those in the sphere of sexual life. If adolescents are not taught to talk realistically about their sexual problems, it is unlikely that in their couple lives they will be able to communicate with their partner.

We believe that the establishment of sexual life counseling centers could clearly contribute to improving the future social and family adaptation of adolescents, leading to a decrease in the number of divorces over time. At the same time, as a direct effect, such counseling could lead to the avoidance of unwanted pregnancies in adolescents. Perhaps, in fact, counseling should be begun from the gymnasium, when the preadolescents have neither the

ability to understand the consequences of their actions, nor the information necessary for knowing the physiological phenomenon, nor the responsibility or ability to raise a child.

Romanian education should take into account the increasingly alarming statistics that are being circulated in the media and try to regain some of the lost ground in this field.

**Acknowledgement:** We hereby state that the subjects involved in our research were informed about the voluntary character of participation in this research, about the understanding of information and of that fact that withdrawal from research is possible at any time without negative consequences upon the participant. The research complied with all ethical research standards, the research participants/participants' guardians giving their consent to participate in the research.

### **References**

- David, D. (2014). *Dezvoltare personala și sociala*. Iasi: Editura Polirom
- Dincă, M. (2004). *Adolescenții într-o societate în schimbare*, București: Editura Paideia
- Fodoreanu, L. (2004). *Psihiatrie*. Cluj-Napoca: Editura Medicală Universitară "Iuliu Hațieganu"
- Galimard, P. (2015). *Psihologia adolescentului de la 11 la 15 ani*. București: Editura Meteor
- Golu, F. (2015). *Manual de psihologia dezvoltării*. Iasi: Editura Polirom
- Hoyle, R.H. (2014). *Handbook of Personality and self-Regulation*, John Wiley and Sons Ltd., Oxford
- Modrea, M. (2006). *Imaginea de sine și personalitatea în adolescență. Studii teoretice și experimentale*. Focșani: Editura Aliter
- Moldovan, O.D., Bălas-Timar, D. (2010). *Psihologia adolescenței și vârstei adulte*. Arad: Editura Universității Aurel Vlaicu
- Popa-Velea, O. (2013). *Științele comportamentului uman*, București: Editura Trei
- Verza, E. (2000). *Psihologia vârstelor*. București: Editura Pro Humanitate

## **CRITICAL THINKING, AN EFFECTIVE EDUCATIONAL TOOL IN PHILOSOPHICAL COUNSELING**

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**Abstract:** *The paper intends to start from a common element, derived from the interdisciplinary link between philosophical practice and didactic practice, to analyze the concept of critical thinking, considered an important element of educational communication and which can become a useful and effective tool in philosophical counseling. We will study some aspects of the application of critical thinking in the new applied field of philosophy, as an important communication element that can be used by the philosophical counselor, which will once again highlight the interdisciplinary connections that can be created by involving the analyzed concept of critical thinking, concept that can be included as an instrument recognized by both practices.*

**Keywords:** critical thinking; education; philosophical counseling; interdisciplinarity; didactic practice;

### **1. Introduction**

The theme of the article was chosen from the perspective of the preoccupations with philosophy put into practice starting from the study of a new concept of philosophical practice recently published in the world, philosophical counseling, to which we have identified many interdisciplinary links with various other fields. We believe that this approach is important in clarifying the role of the concept of critical thinking in the development of theories of philosophy based on logic and arts of argumentation that can become effective and necessary tools in philosophical counseling, as a specialized practice of philosophy and implicitly a new profession with a liberal character.

### **2. Literature review**

#### **2.1. Introduction to Critical Thinking and Philosophy**

If we look into the history of philosophy, we identify elements of the current concept of critical thinking, which has been used since antiquity by Plato, who presented the art of dialogue and interrogation, in the form of

socratic dialogues, or Aristotle's logic who formulated the principles of logic used in philosophy, but also by many other disciplines of science. Consistent with the proposed subject, we find that the current elements of the concept of critical thinking have been identified quite recently, if we are comparing to the first attempts of antiquity, and the first reference to critical thinking takes place in Romania only at the beginning of this century, when a first monography of critical thinking is published (Clitan, 2003). From the definition of the studied concept, its origin from logic and the theory of argumentation is observed, being presented for a long time in philosophical schools under these forms of study over the centuries and the transition to the education system was made later at the middle of the 20th century. An analysis of the concept of critical thinking, that we consider valuable for teaching it as a distinct discipline, is done by Philosophy Professor Gheorghe Clitan, who identifies elements specific to presenting the concept from a philosopher's point of view, with reference to how this concept was included in logic and theory of argumentation, a discipline that has become part of the basic training of a philosophy specialist, but which can be successfully implemented, in his opinion, in the thinking of ordinary people, as the author says: "Today, ordinary thinking becomes an object of application for philosophy, alongside daily life events and habits, and the practice of intellectual or imaginative skills or aptitudes become the most critical tool of critical thinking. Thus, centering on argumentation, philosophy gains the status of critical thinking, while critical thinking becomes applied philosophy"(Clitan, 2003, pp. 88-89). We note in this wording a reference to the applied philosophy, using the help of thinking critical point of view, on which we will continue to study, starting from its interdisciplinary links.

## **2.2 The interdisciplinary link between education and philosophical practice, realized with the help of critical thinking**

A similar approach, highlighting the interdisciplinary link created between didactics and education on the one hand, and philosophy and philosophical practice, on the other hand, through the concept of philosophy for children introduced by Matthew Lipman, addressed to the educational system at all levels through educational programs aimed at students and young people, in various stages of training and learning. On this educational concept for children, Lipman states that it is "an example of the application of research in the field of education" (Cosentino, 2002, p. 43), where the emphasis is on learning a way of thinking, being different from to learn about thinking, must be done in a self-correcting way, based on research on a community. The same researcher notes the orientation towards critical thinking and advocates introducing it into his curriculum, showing that

“there is a general consensus on critical thinking, which develops the problem-solving ability and decision-making” (Cosentino, 2002, p.45). In this educational concept, there are many instruments of philosophy, specific to logical reasoning, which are actually basic elements of critical thinking recently developed as a distinct concept. The educational project developed by Lipman was also used and developed by philosophy practitioners, which included this field, intended for children, in their research and program concerns. In so-developed educational practices, either in the form of philosophy for children or in the form of community of inquiry or laboratory of research, all this didactic programs also include in their structure study materials taken from applied philosophy, we referring here to stimulus type materials and of the model type, (Cosentino, 2002) that support the specialists in education involved in such programs.

If, at first, critical thinking was presented predominantly as part of the educational system, an area in which it originally manifested itself was that of applications for law students and teachers, and was subsequently taken over by the judiciary system, which identified the need for acquiring elements of critical thinking, especially in the form of items for the development of legal and investigative reasoning, with explicit application in the causes under judgment. Another component of the legal system has noted the same need to acquire the art of reasoning and applied logic, here we refer to law specialists working in the field of law, as a profession dedicated to the defense of the rights and freedoms of the person, and who are aware of the requirement of deepening the basic elements of critical thinking, as an essential and useful element in the preparation of good defense or pleading. At interference with philosophy, at first there were elements of critical thinking manifested in the discipline of Logic as a part of any training program in the field of theoretical philosophy, and which were put into practice in philosophy by the philosophical researches materialized only in academic papers, mostly addressed only to philosophers or those who study philosophy.

In this works and studies, critical thinking is one of the working tools used to present argumentative logic or other adjacent applications. Mircea Dobre, who supports the place of critical thinking “within the broader framework of logic” but also defines it interdisciplinary as “a *new logic*, which no longer emphasizes the formal, symbolic, rigorous aspects, instead focusing on the practical aspects of logic; it is a logic applied to ordinary thinking, perhaps even a training for the argumentative aspects of everyday life; it is a logic adapted to the requirements of everyday reasoning, but also to those of reasoning in certain sciences, since it was adopted with success by psychology, law, sociology, economy, etc.”(Dobre, 2013, p. 40), resulting



here the implicitly positioning critical thinking within the broader framework of his philosophy and practice.

### **2.3 Criticisms and support of the application of critical thinking**

As an alternative to critical thinking, in 1994 Edward De Bono comes up with a new concept, that of *parallel thinking*, and draws some personal conclusions based on the socratic model from which he left. In the volume that he published on this theme, the author's stated intention is to show that "in a world undergoing rapid change, the traditional thinking system fails because it was not designed to deal with change." (De Bono, 2017, p.5). De Bono's critique is amplified in the chapter on *Criticism and the Deletion of Truth* (De Bono, 2017, pp. 42-49) where he states that the Western world has some obsession for criticism and attack, a trend that has its origins in the socratic method, remarking that "Socrates was delighted with rejecting" (De Bono, 2017, p. 43). The author himself becomes a critic of critical thinking, of which he considers that it can not be a maximum of the human intellect, and "Western culture has always privileged critical thinking in an exaggerated way" (De Bono, 2017, p. 44). To substantiate his claims, De Bono has some personal explanations that rely on the practical needs of education, the fact that often the participants in a conversation or analysis prefer to focus on the variant of failure, and criticism brings immediate emotional satisfaction or it can give a chance to the unfulfilled to be fulfilled, even if criticism is much easier. The conclusion of this author is tough when he states: "However, we must realize that critical thinking in itself is insufficient. We must temper our obsession with critical thinking. [...] We must be very critical of critical thinking, aware that this is often just an inexpensive and simplistic thinking exercise."(De Bono, 2017, p. 48). Criticism, in its opinion, is only a component of human thinking, being "a lower form of intellectual effort", and "alternative prospects can sit in parallel, side by side" (De Bono, 2017, pp. 48-49). The option proposed by Bono is considered to be particularly useful for a true and fair approach to education, which aims at developing a learning system based on both forms of human thinking.

In spite of all these criticisms, we have also identified support for the concept, especially in the field of education, through research by Professor Daniela Dumitru, a specialist in education sciences, who finds that critical thinking "will have to become an essential component of classroom work" (Dumitru, 2013, p. 11). She also notes the interdisciplinary perspective of critical thinking, being linked with philosophy through argumentation theory, with psychology through the development of critical attitudes, and the education sciences in general. (Dumitru, 2013, p. 23) The author states in her book, with the suggestive title: "Who is afraid of critical thinking?" that

although this concept has been initially used in the philosophers' community, in Romania since 2003 there is a promotion emphasis on the training of teachers in the national education system, for the implementation of critical thinking at all levels of education, from primary to secondary, to high school and in university through interdisciplinary programs. In 2005, the Institute of Magistracy launched a complex set of tests of critical thinking, adapted to the Romanian specificity, to which many specialist from law, educational, philosophical and other specialists worked. (Bieltz, et al., 2010).

## **2.4 The role of critical thinking, as a useful instrument in philosophical counseling**

The role of critical thinking in philosophical counseling is also pronounced by Elliot D. Cohen, a specialist in cognitive-behavioral counseling, showing how informal logic can be applied to philosophical counselors, or how logic can be used as a useful technique in the philosophical counseling, a new profession, which thus benefits from a new tool, by the critical thinking. Elliot emphasizes that critical thinking has contributed to philosophical counseling, which he says is more empowered to use logic than psychologists do, ending his article with a urge: "Just look at Socrates!" (Lahav & Tillmans, 1995, pp. 122-131).

Analyzing the work of this practitioner (Sulavikova, 2014, p. 575), some hypotheses underlying Cohen's logic therapy have been highlighted, namely: logical deduction can act on people's emotional behavior, which is prone to errors; the tendency towards perfection of people negatively influences the behavior, the problems thus generated can be overcome by the will; and critical thinking is a useful tool that can also be taken up in philosophical counseling. Among the practitioners or supporters of critical thinking as a useful tool for philosophical practice is Tim LeBon (LeBon, 2007, p. 4), who puts critical thinking among the five philosophical methods he proposed in his counseling along with conceptual analysis, phenomenology, thought experiments and creative thinking, showing: "Critical thinking is perhaps the single most useful philosophical method for the counselor. Its value is that it enables clients to be more rational and reasonable in their decision-making, beliefs, values and emotions (LeBon, 2007, p. 138).

## **2.5 Critical thinking and education**

Remaining in the context of the same author, he recommends practitioners who have omitted critical thinking in their training, by eliminating it from the curriculum, to rediscover these thinking skills and introduce them into their counseling work. He reconsiders the use of critical thinking in the decision-making process, using logic as an inductive or

deductive working method for evaluating arguments: "Critical thinking helps us to be more rational and reasonable in life by helping us to evaluate arguments."(Le Bon, 2007, p.139).

Tim LeBon pronounced at the beginning of his work both in favor of applying critical thinking to the evaluation of philosophical theories, but also shows the help that this instrument can offer in counseling his clients for making decisions. "We will use critical thinking to evaluate philosophical theories and also investigate the extent to which critical thinking can help clients towards emotional wisdom, good decisions and enlightened values" (Le Bon, 2007, p.4).

Returning to the analysis of the classical educational system, which was considered to be traditional, based on a thinking considered to be "vertical," in 1967 another process that was then considered to be innovative was introduced, Edward de Bono's concept of lateral thinking (De Bono, 2010), which eliminates the patterns of thought in which logic was used, and proposes adding the creativity and intuition to be introduced into the system of thought used in classes, and which are, according to the author, ways of using the human mind, similar to logic, but they restructure the existing conceptual model or create new models, showing that the two types of thinking are complementary. (De Bono, 2010, p. 12). In this context, LeBon makes a remark that both the creative thinking, presented by Edward de Bono, and critical thinking, as originally presented (Ennis, 1996), are useful tools for decision-making. The research conducted by Daniela Dumitru to "study the correlation between integrated educational programs and the development of critical thinking" (Dumitru, 2013, p. 103) leads the author to some conclusions, namely: that caution is needed in the intention to generalize the capacities of critical thinking, the solution being to create programs specific to each field of work, and interdisciplinary courses are only useful for everyday use, where if properly used it becomes a character trait. The same study also resulted in the need for a mentor to assist in the training of a specialist in critical thinking.(Dumitru, 2013, p. 171).

## **2.6 Critical citizenship, an interdisciplinary component with educational implications**

In the same direction of studying interdisciplinary links, there is a more recent concern of the citizen-oriented educational system, where critical thinking can become a useful tool for citizenship education. This innovation can rightly be considered an application of critical thinking, this time at the social level, where a new concept, the one of *critical citizenship*, is spoken of, about which we can say that it is still in a process of definition, whether it can only be followed at the conceptual level at first, afterwards it can be followed by positioning it as a practice of critical thinking in the social field

of the citizen who becomes more involved and more active in the democratic process of the society in which lives. Practically, this concept of critical citizenship attempts to take on elements of critical thinking, which can become useful tools in this area of the citizen's social involvement, but which, in our opinion, must be embedded in strategies and programs for the development of democracy within the applicant company. Intuitively, we dare say that the development of this concept, through its definition and implementation, can bring about beneficial changes in society, with effects both on the community and on the citizen. The proposed model was tested in smaller or isolated communities, specific to Nordic countries in Europe, where developments in citizens' involvement in community decision-making have been noticed and are being evaluated for the development of the concept and its application to larger communities. The proposed solution for achieving this implementation can be given by the support that should come from the state and the citizens' associations, to promote major projects in the citizenship and social field, in the sense of presenting and promoting the new concept of critical citizenship in various ways, starting with the educational ones, until it is put into practice, based on the programs developed within the community.

### **3. Methodology**

In order to highlight the purpose of this paper, we conducted direct observations to study transversal programs conducted at the West University of Timisoara, as well another masters program specialized in philosophical counseling, started in collaboration with the Institute of French Philosophical Practice and Ca'Foscari University in Venice. Thus, in order to increase the students' interest in philosophy, the discipline of critical thinking was recently introduced in the interdisciplinary didactic projects carried out between the faculties of the University of Timișoara, attended by students from various fields, and where the philosophy professor presents to all participants, some elements of critical thinking, necessary to learn the art of argumentation and logic applied to any field of study.

The first attempts to put critical thinking into practice in a new orientation in philosophical practice, we referring here to philosophical counseling, were made in Europe by the practitioner Oscar Brenifier, who developed a method of philosophical counseling based on the art of questions, that he has successfully used in individual philosophical counseling but also at working group level. The French practitioner included in his work procedures elements of critical thinking that became work tools taken from the educational procedures originally developed by him and applied in the didactics of teaching philosophy of children and students through tools like the philosophical lab, community of inquiry, philosophy

for children, and narrative philosophy, where he used patterns of reflection from Nastratin Hogeia stories as models of reflection.(Brenifier, 2015). In Brenifier's view, philosophical practice is given by thought processes or philosophical reflection, which is manifested in 3 stages, the first being the identification of the dilemma or the problem, followed by criticism "for the identification we must think of the other person, for critique we must think through the other person" and the last is the conceptualisation: "that to think at yourself, in the same mode like at to other" (Brenifier, 2015, p. 29-30).

These procedures have led to the improvement and refinement of a questioning style of this practitioner, moving from the Socratic and Aristotelian logic model, being complemented by the instrument of critical thinking, a basic element in the art of asking questions, but also from educational applications developed by him. Brenifier is himself like advocate of a counselors, called to have a combatant style recently he introduced in counseling the procedure of making a socratic pact with the client which contains ten rules that are in the working procedure, based on the art of interrogation and dialogue between the parties (Hațegan, 2018, p. 162). Although we have not identified the practitioner's express reference to the concept of critical thinking, from the analysis of his educational applications, especially the philosophy for children and the description of other educational practices for school, as well as the observations made by participating in some of the group presentations or workshops that took place within the master program that we refer to, we can say that constant elements of critical thinking were used as basic tools in formulating the questions and counseling procedures of his practice.

If Philosophy for children was originally intended for children who participated in the programs developed by Lipman, he later recognized the importance of extending it to the educators and teachers involved in the process of learning philosophy, reaching the point of doing philosophy in the classroom, generating the concept of Philosophy in the Classroom (Volpone, 2013, p. 60) involving both children and adult learners. On this reasoning, the transition from P4C to a philosophy addressed to all - Philosophy for all (Volpone, 2013, p. 61), which continues through another extended concept from the philosophical counseling, called Philosophy for Community - P4Co (Volpone, 2013, p.61). The philosophers' preoccupation for this field materialized more recently through the contribution of philosophy to the training of specialists in education that can successfully apply the philosophy for children program, in which the discipline was included in the masters programs of philosophy, we note here the program *Philosophical counseling and consultancy* from Timisoara, where the participants did practice in some schools in the city, along with educators or school teachers, who were

interested in learning new working skills with students in the field of philosophy and implicitly of critical thinking.

In the pilot project of training for the new profession, through the Philosophical Counseling and Consultancy course started in 2015, we noticed the situation where, if the educator comes from the theoretical field, he tends to stay on that direction to present the concept of critical thinking by limiting it to what is often a strictly academic approach to philosophy, without including in its presentation useful elements of practice specific to philosophical counseling. When the trainer comes from the area of philosophical practice, there is a change in the way of teaching, it involves the introduction of critical thinking elements in the learning of techniques to generate questions for counseling, but it rarely makes distinct remarks or explicit references to the various ways of applying critical thinking, case which doesn't show the real value of these tools in the professional training.

Before conclusion, we can say that the position currently held by educators working in the field of philosophy, especially those in universities, is focused on maintaining and presenting the concept of critical thinking strictly in the theoretical field, i.e. to develop some useful skills to understand philosophy. If we look at philosophical counseling as a practice of philosophy for ordinary people, where philosophical counseling specialists can come from different fields with basic training, then an identical approach as in theoretical philosophy of presenting them critical thinking, like they were students in philosophy, can not be productive at all. For that reason we propose the implementation of a middle solution that can eliminate these shortcomings in the sense of taking over the elements of the teaching of critical thinking in education which are included in the training programs of the new specialists and which together with other seminars and applied workshops of critical thinking, can become useful tools in the new profession, of a philosophical counselor.

#### **4. Conclusions**

At present there is a serious concern for the creation and development of distinct training programs for educators and educational trainers in postgraduate training programs in which they can be trained in these new specializations, both useful and necessary to an efficient educational system. We must also take into account the current tendency in various countries of the world, within already existing trends, to implement philosophical counseling as a distinct regulated profession, a situation requiring an adaptation of the way in which the philosophic counseling specialist learns to apply critical thinking, as a working tool of its practice. In order for the result to be real, it is necessary to move from the classical philosophy course to an adaptation of the professional training program to the new profession, so that

critical thinking is easily understood and put into practice by any practitioner.

Based on this study, we can state that the application of critical thinking in the new philosophical counseling profession, as a philosophical practice, improves the performance of the practitioner and the specialist formed in the counseling service dedicated to a person, helping both sides to understand the issue or topic proposed to counseling by generating options or arguments, followed by their assessment with the help of this critical thinking tool, which can lead to a clarification of the attitude to the problem under consideration or its resolution, but also to taking decisions useful for person.

From the analysis of these interdisciplinary links result the role and contribution of critical thinking as a necessary and useful tool in the training of a practitioner in philosophy. If in the previous paper on philosophical practice (Hațegan, 2018) we have advocated the need to introduce philosophical counseling as a distinct profession, we consider that we need to pay more attention to the possibility of including critical thinking in the basic training of new specialists trained in philosophical counseling.

We consider it useful that this topic be subject to further research, both from the point of view of the interdisciplinary links generated by the involvement of critical thinking in various fields of activity: starting from the field of education where other forms of application of the concept can be developed, with diverse destinations, from educators and trainers involved in the educational process to the beneficiaries of the educational process, through the extension of coverage and in the systems of professional training or adult learning; the link with various philosophical practices and, in particular, the new philosophical counseling profession through future assessments on how to implement and implement the concept in practice. Another application that is outlined and made only briefly in this paper is the development of the new concept of critical citizenship, which takes on elements of critical thinking that can be implemented in the educational programs needed by the citizen in the process of participation in making decisions in society, according to democratic principles. Of course, the list of these concerns will remain open to other areas where critical thinking can become an application useful to the development of new skills in the field in which the concept studied by us in this paper is applied.

## **References:**

- Arnaud, D., LeBon, T. (2001). Towards Wise Decision-Making III: Critical and Creative Thinking. *Practical Philosophy*, 24-32.
- Bieltz, P., Clitan, G., Dobre, M., Dumitru, M., Forascu, C., Golub, C., Nita, D., Rampelt, A.- M., Serbanescu, I., Tepelea, A. (2010). *Ghid pentru rezolvarea testelor de verificare a raționamentului logic*, București, România: INM.
- Brenifier, O. (2015). *Filosofare come Socrate*. Milano, Italy: IPOC.
- Clitan G. (2003). *Gândire critică – Monografie*. Timișoara, România: Eurobit.
- Cosentino, A. (2002). *Filosofia e formazione*, Napoli, Italy: Liguore.
- De Bono, E. (2010). *Lateral thinking*. București, Romania: Curtea Veche.
- De Bono, E. (2017). *Gândirea paralelă*. București, Romania: Curtea Veche.
- Dobre, M. (2013) Gândirea critică. Câteva repere. *Probleme de logică*, XVI, 37-45.
- Dumitru, D. (2013). *Cui îi este frică de gândirea critică? Programele educaționale integrate și gândirea critică*. București, Romania: Editura Universității.
- Ennis, R. (1996). *Critical Thinking*. Upper Saddle River, NJ: Prentice-Hall.
- Hațegan, V.P. (2018). *Consilierea filosofică: de la practică la profesie*. București, România: Ars Docendi.
- Johnson Laura, Morris Paul (2010). Towards a framework for critical citizenship education. *The Curriculum Journal*, 21, 77-96.
- Lahav, R., Tillmans, M.V. (1995). *Essays on Philosophical Counseling*. Lahman, NJ: University Press of America
- LeBon, T. (2007), *Wise Therapy*. London, UK: Sage Publications.
- Sulavikova, B., (2014). Key concepts in philosophical counselling. *Human Affairs*, 24, 575.
- Volpone, A. (2013). *Practica filosofica di comunita*. Napoli, Italy: Liguori.



## METHODOLOGIES AND METHODS OF BUILDING ASSESSMENT QUESTIONNAIRES IN THE SPSM PROJECT

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**Abstract:** *Santé Publique, Santé Mentale, Employabilité en Europe (SPSM), is a European Project developed by francophone countries in: 2014-2017. Through the project, training modules for professionals have been built. The aim of the research is to present the methodologies employed to construct evaluation questionnaires, and the methods used to built statistical grids in SPSM Erasmus+ Project. Research methods: the evaluation of the SPSM Project was realized after the construction of Knowledge Assessment Questionnaire for Occupational Insertion Professionals for people with chronic mental diseases, and the other one is: Project Management Assessment Grid. First scale is a questionnaire comprising 24 items. It assesses the level of knowledge before and after the training module (Pilot Seminar). This procedure allows us to compare groups of items. The results are 2 questionnaires applied in the project assessment. The obtained results have enabled professionals to improve their skills through better course content.*

**Key words:** *questionnaire; methods; methodologies; project; evaluation;*

### **Introduction**

The questionnaire is a secondary tool of sociological investigation (Miftode, 1982; King, 2005). The methodological approach towards the elaboration of the questionnaires within this European project has been carried out on the basis of the need to assess the level of knowledge of

professionals in the field of occupational integration of people with chronic mental diseases (Gavrila-Ardelean et al., 2016).

The social problem that has been analyzed is the reduction of the costs of handicap in mental disorders (Villotti et al., 2012, 2014 in Gavrila-Ardelean, 2017). This has been achieved through occupational integration of people with chronic mental diseases, with the aid of support specialists. Work is a social and economic utility in itself, for all people, especially for patients with chronic mental disorders, for whom it has psychotherapeutic functions, by increasing self-esteem and social utilities (Gavrila-Ardelean, 2016). Mental health and occupational integration of psychiatric patients have been studied in a synthetic study of the specialized bibliography. Moreover, the needs of three categories of actors involved in the research: beneficiaries, professionals, entrepreneurs, have been studied through questionnaires. (G.,Kelemen, 2017)

The questionnaire, as a technique and as a psychosocial investigation tool, consists of a set of written questions that are ordered logically and psychologically, and which, by self-administration, have determined answers in the investigated group, that have been recorded in the virtual environment (Cazacu, Bădescu, 1981; Chelcea, 1975; Mellenbergh, 2008). The questionnaire was written, computerized, and online administered in the Google documents system. The questionnaire has standardized answers on an graded scale, that facilitate the compilation of statistical data (Durkheim, 1974). In the SPSM Project, the questionnaires have been built on multi-item scales, thus allowing a quantitative collection of data.

The construction methodology of psycho-sociological questionnaires, on multi-item scale consists of (Robinson, 2017):

- Multiple questions for each examined variable (Fulger, 2010);
- An accompanying set of equal response points for each question (indicators, usually 5 or 7), (Miftode, 1982);
- An accompanying verbal anchor for each response ("disagree": 1 – 5: "strongly agree"), ascending in intensity (from left to right), (Norman, 2010);
- A gradual rating scale, as the Likert scale (Likert, 1932);
- The psychometric scale, a multi-element scale used when multiple items measure the same valid variable (Kaplan, Saccuzzo, 2009);
- A factorial analysis (King, 2005).

The multi-item scale must establish internal reliability and test-retest reliability. The psychometric scale requires construction validity and criterion validity (Kaplan, Saccuzzo, 2009).

The questionnaires used for the collection of quantitative data usually include multi-element successive scales, an introductory section, and a section for concluding the questionnaire (Foddy, 1994).

### **General issue**

The project *Santé Publique, Santé Mentale, Employabilité en Europe* (SPSM), is a European Project developed by francophone countries in: 2014-2017.

The aim of the project is to improve professional competences for a better occupational integration of people with chronic mental diseases. Through the project, training modules for professionals have been built. The classes were structured on a week of training for each partner country in the SPSM Project. The content of the classes was built according to a complex analysis of the needs of occupational insertion professionals, beneficiaries and employers in each country participating in the project.

The SPSM Project was evaluated through the *Knowledge Assessment Questionnaire for Occupational Insertion Professionals*. This scale is a questionnaire comprising 24 items. It evaluates the level of knowledge before and after the Pilot Seminar. This procedure enables us to make comparisons by groups of items, for a better course content (Allen, Christopher, 2007).

### **Research Methodology**

The research methodology consists in building the tools needed to evaluate the results of the SPSM Project, based on specific methods of sociological research. Two evaluation questionnaires have been built. One of them is: *Knowledge Assessment Questionnaire for Occupational Insertion Professionals*, and the other one is: *Project Management Assessment Grid*.

As a sociological research method, the questionnaires comprise multiple questions. Each item has been appreciated by marking an answer, so as to assess the level of knowledge of the respondent. The subject's answers are of estimative type (subjective appreciation) of the level of knowledge, on a graded scale from left to right, from 1 (no knowledge) to 4 (very good level of knowledge).

The *Knowledge Assessment Questionnaire for Occupational Insertion Professionals* has been built on 24 questions.

The *Project Management Assessment Grid* was constructed from questions from 5 areas of items and remarks. The scale of appreciation was graded from left to right, from 1 (poor appreciation) to 5 (very good appreciation).

The questionnaires have been computerized and online administrated (Kaplan, Saccuzzo, 2009; Mellenbergh, 2008).

## Research results

The questionnaires are completely anonymous, and enable the assessment of the impact of the pilot seminar on the participants.

The working instructions required the subjects to mark with an X, on a scale of 1 (no knowledge) to 4 (very good level of knowledge), their level of knowledge before and after the training.

In this questionnaires, the persons accompanied at the workplace are designated by the words "users" or "beneficiaries".

The *Knowledge Assessment Questionnaire for Occupational Insertion Professionals* is composed of the following items:

- a) Country of the participant;
- b) Level of degree;
- c) Number of years of professional experience;
- d) Estimated level of knowledge about employment and unemployment measures for people with mental handicap in local context: economic, legislative and social;
- e) Level of knowledge about the local employment market, and business obligations and rights;
- f) Estimated level of knowledge on the local social context, labor law, minimum wages, types of contracts, and the role of trade unions, for people with mental handicap;
- g) Level of knowledge of the impact of mental diseases on the behaviour of beneficiaries at workplace;
- h) Level of awareness of warning signs for a good prevention of crisis and level of knowledge of psychotropic treatment;
- i) Level of knowledge about occupational insertion: limits, content of relevant information, links with the employer, and medico-psycho-socio referents;
- j) Estimated level of knowledge of the enterprises' methods of approach;
- k) Level of knowledge on business: corporate culture, employers' constraints;
- l) Estimated level of knowledge on the commercial marketing approach: techniques of building businesses, and prospecting and negotiating techniques;
- m) The level of knowledge of multidisciplinary partners' network work;
- n) Level of knowledge of the systemic approach, the place and the role of each part in the triptych: users, professionals in occupational insertion and enterprises;
- o) Level of knowledge of the brakes and obstacles that may impede the improvement of the employability of users/beneficiaries;
- p) Knowledge about the concepts of autonomy and self-determination;

- q) Knowledge needed to eliminate prejudice and to improve communication between employer-beneficiary-team, so as to facilitate the insertion;
- r) Knowledge about the ways we can reduce stigma in order to improve the life of the beneficiaries;
- s) Knowledge of recovery methods for beneficiaries;
- t) Inclusion strategies;
- u) Stress management methods;
- v) Ability to analyse the competences of users/beneficiaries;
- w) Estimated level of knowledge of coaching strategies and elements;
- x) Expectations about the Pilot Seminar.

The *Project Management Assessment Grid* has evaluated 5 areas of items, within 28 questions, and final remarks. The scale of appreciation was graded from 1 (poor appreciation) to 5 (very good appreciation). The 5 areas explore the economic and administrative aspects of the management of the SPSM Project, along with the functionality of human resources (table 1).

**Table no. 1. Project Management Assessment Grid**

Elements of appreciation	Criteria-indicators	Indicators of quality	Remarks
<b>1. Public</b>	Number of registrants per pilot seminar	1-2-3-4-5	
	Frequentation - Assiduity	1-2-3-4-5	
	Implication of trainers	1-2-3-4-5	
	Implication of participants	1-2-3-4-5	
	General satisfaction	1-2-3-4-5	
<b>2. Partnership</b>	Composition	1-2-3-4-5	
	Implication - Engagement	1-2-3-4-5	
	Satisfaction	1-2-3-4-5	
	Link to other European projects	1-2-3-4-5	
<b>3. Information/ Communication</b>	Quality of information	1-2-3-4-5	
	Communication between partners	1-2-3-4-5	
	Communication between local actors	1-2-3-4-5	
	Communication in the world of	1-2-3-4-5	

	education		
	External communication	1-2-3-4-5	
	International scientific communication	1-2-3-4-5	
<b>4. Human resources</b>	Repartition of the human resources	1-2-3-4-5	
	Adequacy of needs	1-2-3-4-5	
	<b>Satisfaction of actors:</b>		
	Trainers	1-2-3-4-5	
	Professionals	1-2-3-4-5	
	Satisfactions of partners	1-2-3-4-5	
<b>5. Follow-ups of the project</b>	Quality of the of project's coordination	1-2-3-4-5	
	Following the schedule	1-2-3-4-5	
	Budgeting	1-2-3-4-5	
	Quality of the project's productions	1-2-3-4-5	
	Professionals' participation	1-2-3-4-5	
	Events and conferences	1-2-3-4-5	
	Intellectual productions	1-2-3-4-5	
	Scientific articles	1-2-3-4-5	
<b>Remarks</b>			

## Conclusions

The questionnaire, as a sociological method of scientific research, has been successfully applied in the SPSM European Project.

In the European context of employment crisis, and complexity of relationships between the economic world and the society, we rise to the challenge of proposing mental health training (Gavrila-Ardelean, Gavrila-Ardelean, 2015).

These two examples of questionnaires explore the level of training of occupational insertion professionals for people with mental diseases, along with the quality of European project management. The results of the questionnaires guarantee the quality of occupational insertion training, and establish transferable and accessible recommendations at European level, both at macro-political and micro-structural levels (Organisation of training and University), (Gavrila-Ardelean, et al., 2016).

## References:

- Allen, E., Seaman, C. (2007). Likert Scales and Data Analyses. *Quality Progress*, 64–65.
- Cazacu, A., Bădescu, I. (1981). *Metode și tehnici de cercetare sociologică*, Universitatea din București.
- Chelcea, S. (1975). *Chestionarul în investigația sociologică*, Editura Științifică și Enciclopedică, București.
- Durkheim, E. (1974). *Regulile metodei sociologice*, Editura Științifică, București.
- Foddy, W.H. (1994). *Constructing questions for interviews and questionnaires: Theory and practice in social research* (New Ed.). Cambridge, UK: Cambridge University Press.
- Fulger, I.V. (2010). *Metodologia cercetării în științele socio-umane partea a II – a*, Centrul de multiplicare al Universității din Petroșani, Petroșani, Editura Universitas.
- <file:///D:/Metodologia%20cercetarii%20in%20stiintele%20socioumane/Metodologia%20Cercetarii%20in%20Stiintele%20Socio-Umane.pdf>
- Gavrila-Ardelean, M., Gavrila-Ardelean, L. (2016). *Elemente de medicina intena si sociala*, Bucuresti: Eikon.
- Gavrila-Ardelean, M. (2016). Reducing the Stigma of People with Mental Handicap. *Agora Psycho-Pragmatica*, 10(2), 39-45.
- Gavrila-Ardelean, M., Fond-Harmant, L., Kelemen, G. (2016). The Improvement of the Counselors Competences for the Professional Integration of People with Mental Disorders. *Asian Academic Research Journal of Social Science & Humanities*, 3(4), 29-40.
- Kaplan, R.M., Saccuzzo, D.P. (2009). *Psychological testing: Principles, applications, and issues*. Belmont, CA: Wadsworth.
- Kelemen Gabriela, Social and cultural contexts regarding mental health in Europe. *Intervention strategies*, *Journal Plus Education*, Vol 17, No 1 (2017)
- King, R. (2005). *Strategia cercetării. Treisprezece cursuri despre elementele științelor sociale*, Editura Polirom, Iași.
- Likert, R. (1932). A Technique for the Measurement of Attitudes. Archives of Psychology. 140: 1–55.*
- Mellenbergh, G.J. (2008). Chapter 10: Tests and questionnaires: Construction and administration. In [Adèr](#) H.G. & G. J. Mellenbergh (Eds.) (with contributions by D. J. Hand), *Advising on research methods: A consultant's companion*, Huizen, The Netherlands: Johannes van Kessel Publishing, 211–234.
- Miftode, V. (1982). *Introducere în metodologia investigației sociologice*, Editura Junimea, Iași.

- Norman, G. (2010). Likert scales, levels of measurement and the “laws” of statistics. *Advances in Health Science Education*, 15(5): 625-632.
- Robinson, M.A. (2017). Using multi-item psychometric scales for research and practice in human resource management. *Human Resource Management*. <https://dx.doi.org/10.1002/hrm.21852> (open-access).
- Villotti, P., Balducci, C., Zaniboni, S., Corbiere, M., Fraccaroli, F. (2014). An analysis of work engagement among workers with mental disorders recently integrated to work. *Journal of Career Assessment*, 22(1), 18-27;
- and Villotti, P., Corbiere, M., Zaniboni, S., & Fraccaroli, F. (2012). Individual and environmental factors related to job satisfaction in people with severe mental illness employed in social enterprises. *Work*, 43, 33-41; in Gavrilă-Ardelean, 2017. *Personal Needs And Psycho-Social Expectancies Of People With Mental Chronic Disorders Regarding Professional Insertion*, Revista de cercetare și intervenție socială, Expert Projects Publishing House, 56: 57-69.



## STUDENTS' PERCEPTION CONCERNING ELDERLY PEOPLE WITH MENTAL HEALTH PROBLEMS

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**Abstract:** *ARPA project is a strategic project with generous objectives regarding the care of the elderly people facing mental health disorders. The goal of the project is the development of competences with professionals in the field of social work related to support for the elderly people who face mental health issues in such a manner that they would be able to face age related challenges but also the severe problems brought about by such an illness. The project aims a double perspective: dissemination of good practices in Europe on care and accompaniment for the elderly with mental health issues and reduction of social breakdown situations through actions of reintegration in the social life. We wanted to conduct a social enquiry among our students as part of the project to see their perception towards the elderly people, their level of knowledge in terms of mental disorders and palliative interventions when they face such situations. This is a questionnaire-based quality study.*

**Keywords:** *project; mental illness; elderly people; interventions; qualitative study;*

### Project Methodology

The objectives of the project are phased over two years and aim at:

1. Knowledge of the current situation in the five participating countries: Luxembourg, France, Belgium, Greece and Romania. Identifying the existence of social networks to help the elderly with mental health problems. Study of the specialized literature in the field and the elaboration of relevant studies.

2. Knowledge of field needs. What are the needs of elderly people with mental health problems and professionals working in the field in each country and what can be done to alleviate stringent needs.
3. Analysis of results. Based on studies from a socio-cultural perspective, on research into existing networks and literature to improve interventions.
4. Dissemination of results to improve professional skills. Creating a

- platform for the exchange of good practices and communication between professionals in the field.
5. Testing technical solutions: Platform testing and continuous improvement for a proper functionality.
  6. Developing recommendations through the development of a good practice guide on social networks and the analysis of social and cultural contexts.

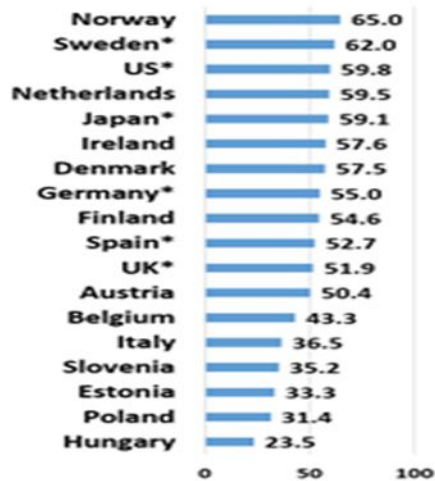
### **Conceptualization-aging**

Due to the fact that fewer children are born, demographics have fallen, and the population of Europe is experiencing an unprecedented aging, it is expected that in 2025 more than 20% of Europeans will be at least 65 years old, and by 2050, the number of elderly over 60 will exceed that of children up to 15 years of age worldwide (Oxford Press, 2014). In Romania, the situation is as follows: one in seven Romanians is over 65, in 2030 there will be a ratio of 1 to 5 persons and in 2060 to 1 in 3. The way man relates to age is different, there are several factors that determine this aspect: the culture they belong to, education, information in the field, age, etc. It is certain that the aging process is an absolutely natural and biological process. It must be seen as a natural stage in human life. After all, it is important to keep a good quality of life at an older age. At what age is a man considered old? And here is a series of discussions, generally when the person retires and no longer performs a socially useful activity. Thus, old age is considered after 65. Old age brings with it a certain fragility, a decrease in physical strength, often accompanied by various physical conditions. On the other hand, the level of valorization, the social status of retired persons decreases with the aging. The majority of older people evaluate their quality of life positively on the basis of social contacts, dependency, health, material circumstances and social comparisons.

There are various studies on aging and the difference between anagraphic age and biological age (Proceedings of the National Academy of Sciences). These serious studies conducted on a group of 1,000 people over a period of 30 years have provided precious information that prove huge differences among subjects in terms of aging rhythm. Then we ask ourselves the question which factors determine these substantial differences. The answer also comes from studies that have demonstrated two key factors that determine aging: lifestyle and genetic heritage. If genetic inheritance is implacable, a healthy lifestyle, social activity, movement, hypoallergenic nutrition along with an optimistic attitude are ingredients that are necessary for an old age without difficulty.

Columbia University and USC have analysed the countries where the elderly are best cared for and based on their findings have ranked them as follows:

The John A. Hartford Foundation  
Index of Societal Aging



### Distinctive characteristics

Improving the quality of life of older people who have acquired a mental illness is a major objective and can be achieved by activating social, demographic, psychosocial and biological factors. Poverty, social isolation, loss of independence are causes that worsen the mental health of older people. Promoting mental health involves creating conditions for elderly people to enjoy life, and their personal qualities and talents, developing creative activities, and participating actively in social life. An elderly person who has contacted a mental illness faces issues related to that mental illness in addition to age-related problems. Fear of stigmatization can lead to isolation behaviours of the person in question that gradually loses confidence and self-esteem, which ends with the degradation of family relationships and alienation.

These lead to the complication of the disease. That's why it is absolutely necessary for the family and the close ones to be aware of the problems that are related to the symptoms of certain diseases, to intervene early. Such situations require preventive measures, health education, mental health promotion, treatment according to the illness and the person concerned and palliative intervention that is often long-lasting and needs continuous treatment. Elderly people with mental health problems have certain symptoms that can be identified by their close ones who are able to intervene and help them overcome the problems they face. The warning signs are easily noticed if we pay attention to the following:

- lose the pleasure of living and no longer enjoy anything;
- they no longer feel useful and see no purpose in their lives;

- experience strong feelings of guilt;
- isolate from family, friends, society;
- experience strong panic, fear, anxiety;
- lose interest for the most pleasant concerns and hobbies;
- show a state of lethargy, lack of energy;
- have difficulty in ending an activity, weak concentration;
- irritation, uncontrolled nervousness;
- hear voices and see things that other people do not see;
- believe that other people conspire against them;
- have violent tendencies towards themselves and others;
- feel unable to cope with day-to-day problems and activities;
- show substantial changes in their daily eating and sleeping habits (G.Kelemen, 2017).

### **Psychiatric conditions associated to the elderly people**

Degenerative changes in the brain come along with aging in the biological aging phase, around the age of 65-70 years. Even in the normal aging process, the neurotransmitter activity is reduced: dopamine, serotonin, acetylcholine, noradrenaline, GABA, glutamate, etc., which are chemicals that provide the transmission of nerve impulses between neurons, but in the elderly with mental problems the issue is more complicated. They face diminished learning capacity, reduced memory, lack of attention, etc. All these are accompanied by emotional disturbance: irritability, psychomotor agitation, aggression, depression, etc., and the elderly react to these transformations through panic, sadness, discouragement, frustration, anxiety, etc. The effects of these processes are cognitive and emotional changes. When the brain is atrophied, there is an inability to perform simultaneous actions, to process information from multiple and simultaneous sources, lower concentration power and attention up to a functional level, diminished thinking ability, and difficulties in almost all plans of psychic life.

Among the most common symptoms in the elderly is the anxiety-depressing one, caused by the physical illnesses that arise with aging and dementia. The state of anxiety determines the patient's ailment characterized by suffering and unhappiness. Anxiety brings about associated manifestations such as sleep disturbance, loss of appetite, weight loss, constipation, loss of joy of living.

Parkinson's disease is manifested through symptoms of tremor and muscle stiffness, slow or limited movement. It is a slow-evolving disease that sometimes goes unnoticed by family, friends, and even by the person in question. Symptoms can only develop on one part of the body, or on both.

Dementia is an abnormal atrophy of cerebellum and cerebral hemispheres, genetically as well as environmentally determined, to which vascular factors are added causing the reduction of cerebral oxygenation. The consequence are the progressive cognitive disorders.

Bipolar disorder may also occur in the elderly and should be treated even if the onset is late.

Schizophrenics and schizophreniform disorders. Schizophrenia is a serious illness whose onset in older age is not excluded. Delusion or confusion in the elderly is an acute disorder with symptoms of varying degrees of severity, with unpredictable and dramatic evolution.

Degenerative disorders caused by Alzheimer's disease cause significant changes in brain functions due to nerve cell loss and to the linkages between them. Early intervention requires periodical control, a neuro-geriatric evaluation with memory tests for the detection of dementia, especially if the family perceives small disturbances in the behaviour of the elderly.

Household care of elderly people with or without disabilities is also required in Romania. Home care in their normal living environment is the best alternative to specialized centres for the elderly

or other types of institutions.

Home care is the best option because it allows families to remain united by preventing rupture and allowing dependent elderly people to stay at home and receive the necessary care. It is well known that the elderly prefer to receive care in a comfortable, family environment rather than in a protective institution.

### **Methodology of research**

In order to ascertain the students' awareness level regarding the issue of elderly people with mental problems we conducted a study based on a questionnaire, applied to 500 students, 250 of the undergraduate years and 250 of the final graduate years and master students from the following study programmes: Educational Sciences, Psychology and Social Work. The questionnaire was uploaded to google.doc, and students were asked to respond honestly to the 12 questions:

1. Which is, in percentage, the share of the elderly in the overall population structure?
2. Aging takes place at the same biological, psychological and social pace? Explain
3. Comment upon the differences between the 4 ages: chronological, biological, psychological and social.
4. What is old age and how do you explain aging?
5. Classify the periods of human aging:
  - a. shift towards old age s: from ..... to ..... years;

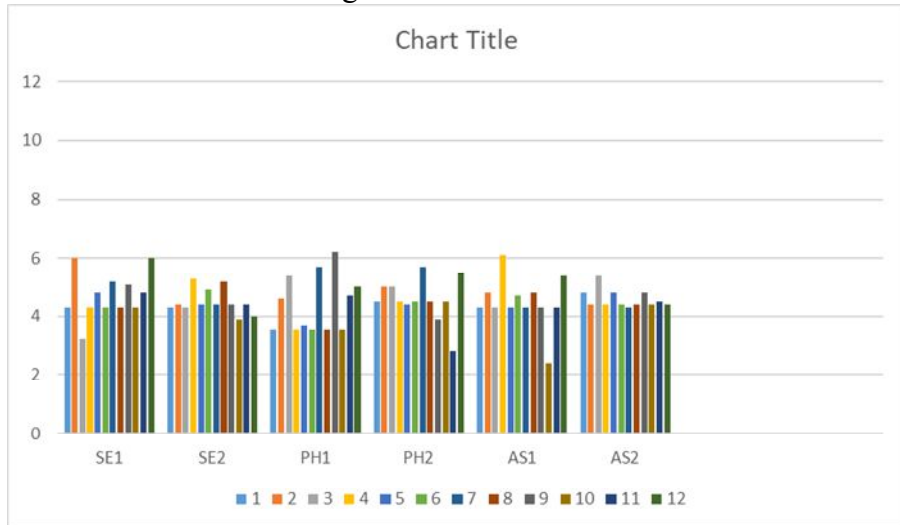
- b. middle old age: from .....to ..... years;
  - c. old age: over ..... years
6. Aging is caused by:
- a. the destruction of genetic information involved in cellular protein formation, an existing program in the genetic code, errors occurring in the process of transmitting information, from DNA to RNA.
  - b. Progressive biochemical failures, the accumulation of unnecessary or toxic substances in the body cells such as free radicals.
  - c. the failure of some physiological coordination systems in an attempt to properly integrate body functions such as the immune system.
7. Can aging be delayed?
8. Explain in your words what you know about the following geriatric disorders:
- a. Atherosclerosis;
  - b. Cognitive decline;
  - c. Anxiety-depressive syndrome;
  - d. senile osteoporosis;
  - e. Alzheimer;
  - f. senility;
  - g. dementia.
9. What is your attitude towards an elderly person:
- a. ironical;
  - b. indifferent;
  - c. considerate;
  - d. respectful;
  - e. empathic.
10. Who cares for an elderly person incapable of caring for her/himself?
11. Are you familiar with settlements for the elderly?
2. How can society improve the elderly`s health and quality of life?

### **Data interpretation**

We notice, when comparing the data that students in the early years of study have less information on the issues of elderly people with mental health problems, while students in the final year have more nuanced and more objective perceptions. We also notice a qualitative difference in terms of student knowledge about the various psychiatric disorders, the ways of intervention and care of students from the Social Work programme as compared to those enrolled in pedagogy and psychology.

The qualitative difference is noticeable at Master programmes, as students enrolled in Social Work Services have more information in this field. They have provided more competent answers than the students from other Master study programmes. However, we have to state that master

students provided more accurate answers than the undergraduate students from the 1<sup>st</sup> and 2<sup>nd</sup> year of study. We notice significant differences with 3<sup>rd</sup> year students in terms of knowledge and attitude.



## Conclusion

Our study proves one aspect, students, especially those from pedagogy do not know the issues faced by older people and do not know issues related to mental illness. The involvement of students in the faculty's projects brings about information and the ability to intervene when needed, but especially makes them aware of the existence of such problems. These studies contribute to raising the awareness that it is particularly important to teach students how to care for the elderly, and especially how to relate to an elderly person suffering from mental illness. Students should be instructed with the knowledge that is absolutely necessary for empowerment so that they can recognize certain symptoms and manifestations of mental illness, but above all know how to act when they have family or close relatives who show a symptom a mental illness and to intervene effectively.

## References:

- Corbière M, Durand MJ, & al. (2011). Du Trouble mental à l'incapacité au travail. Une perspective transdisciplinaire. Presses de l'Université du Québec. Whitley, R., Kostick, K. M., & Bush, P. W.
- Gavriliă-Ardelean M., *Reducing the stigma of people with mental handicap\** The International Symposium Research and Education in an Innovation Era, 6th Edition, December 8th -10th 2016, Arad

Kelemen Gabriela, *Social and cultural contexts regarding mental health in Europe. Intervention strategies*, Journal Plus Education, Vol 17, No 1 (2017)

Knapp M., McDaid D. and Parsonage M. (2011) Mental health promotion and mental illness

prevention: The economic case, Department of Health,

Legea 487/2002 republicata 2012, legea sanatatii mintale si a protectiei persoanelor cu tulburari psihice,

Obsan (2011). La santé en Suisse latine. Analyse des données de l'Enquête suisse sur la santé 2007

Neuchâtel: Observatoire suisse de la santé.

[http://centruldesanatatemintala.ro/sanatatea\\_mintala\\_in\\_licee/files/in-atentie-sanatatea-mintala-a-copiilor-si-adolescentilor.pdf](http://centruldesanatatemintala.ro/sanatatea_mintala_in_licee/files/in-atentie-sanatatea-mintala-a-copiilor-si-adolescentilor.pdf)\*\*\*Centrul de sanatate mintala. Conceptul de sănătate mintală

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[http://ec.europa.eu/health/archive/ph\\_determinants/life\\_style/mental/docs/romania.pdf](http://ec.europa.eu/health/archive/ph_determinants/life_style/mental/docs/romania.pdf)

<https://doxologia.ro/puncte-de-vedere/imbatranirea-populatiei-dramabatranetii-realitati-ale-lumii-contemporane>

<https://www.independent.co.uk/life-style/grow-old-world-best-country-age-elderly-benefits-care-norway-sweden-us-netherlands-japan-quality-a7860786.html>



# **CROSS-ANALYSIS OF KNOWLEDGE AND SKILLS IN THE PERFORMANCE OF MOROCCAN PUPILS (15-16 YEARS) IN SOLVING ELECTRICITY PROBLEMS**

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**Abstract:** *This paper aims to cross knowledge and skills in analyzing the performance of Moroccan pupils (15-16 years) of third year classes of college in solving problems of electricity (Ohm's law, electrical power and electrical energy). The analysis of succeeded, failed and untreated tasks by pupils was carried out in terms of declarative, conceptual and procedural knowledge involved in (appropriate, analyze, achieve) skills relating to (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> degree) skills. For problems built with explicit questions, the pupils showed medium performance in mastering and mobilizing the different skills involving declarative, conceptual and procedural knowledge, whereas pupils find it difficult to mobilize these skills to perform the complex implicit tasks, inherent to an open problem.*

**Keywords:** *problems solving; skills; appropriate; analyze; achieve; performance; procedure; complex; task; capacity;*

## **1. Introduction**

The training of pupils in college is not limited to the transmission of scientific knowledge; it also aims to develop capacities and skills, which may be transferable from one situation to another, from one disciplinary field to another. Hence, problem solving implies the connection between learners' acquired skills and their ability to mobilize basic skills, thought strategies, and meta-cognitive skills in order to achieve what is asked of them in various situations (Proulx, 1999).

Considered as a cognitive activity serving the completion of a task in a given situation (Richard, 1990; M. Goffard, S. Goffard, 2003), the problem

solving marks the transition from elementary activities to higher mental activities and intellectual processes involving knowledge, which was acquired previously.

Several researches have focused on building of capacity and on improving pupils' performance in problem solving activities (Dumas-Carré et Goffard, 1997; Meltzer, 2005; Orange, 2005; Larkin et Rief, 2007; Ravanis, 2010; Mazouze, 2016; Ouasri, 2017a). These researches have placed pupils at the center of their preoccupation, in a cognitivist approach of learning, which was used in understanding problem solving acquisition mechanisms (Proulx, 1999).

The analysis of the pupils' difficulties (15-16 years) of third year of Moroccan college in problem solving is carried out in terms of declarative and procedural knowledge, which were mobilized by pupils to perform tasks related to electricity problems (Ouasri, 2017b). The competency approach aims to enable pupils to use their knowledge and skills to solve problem situations (Perrenoud, 1997; Jonnaret 2002; De Ketele and Gerard 2005; Tardif 2006). It is from this perspective that we try to interpret the results obtained in this article containing six parts:

- The problem solving in the Moroccan school context;
- The conceptual framework describing declarative and procedural knowledge involved in solving problems, as well as skills, abilities and tasks.
- The work methodology and the problems submitted to the pupils.
- The two latest parts concern the obtained results, and the analysis and discussion before drawing some conclusions concerning the pupils' performance in solving electricity problems.

## **2. Context and Problem**

Several researches have been carried out on the difficulties of pupils' appropriation of scientific concepts when solving problems in classes (Crahay et Lafontaine, 1986; Goffard, 1994; Rozencwajg, 1997; Giordan, 1998; Malafouse et al, 2001; Orange, 2005; Streveler, 2008; Mazouze, 2011; Ntalakoura et Ravanis, 2014; Mazouze et Lounis, 2015; Ouasri, 2017a, 2017b, 2017c, 2017d, 2017e). These difficulties are usually due to:

- A defective understanding of certain words by pupils the problems' statements;
- A lack of attention, rigor and investment at pupils;
- A lack of prerequisites at many pupils;
- A lack of strategies and logical reflexes among pupils (novices).
- A lack of mental representations of statements at pupils who, afterwards, cannot develop schemes to analyze, and interpret new information (Sweller, 2003).

It is concluded that, in electricity, pupils report particular representations of the electric current as a fluid whose intensity decreases throughout the circuit (Rozencwajg, 1997). In their school itinerary, the pupils who find one of the first functional physical laws, Ohm's law formulated mathematically, have to make an analogy between the proportionality in mathematics and this law in physics. Indeed, Malafouse et al. (2001) have interpreted the pupils' difficulties in terms of the breaking of rationality between mathematics and physics at the level of numbers dimensionality, the concept of proportionality, and the difference in the nature of validation rules.

Researchs have shown that many learners fail to build basic electrical concepts in a coherent framework, which prevents them to acquire a deep conceptual understanding of electricity, and of electrical circuit behavior (Başer et Durmuş, 2010; Başer and Geban, 2007; Glauert, 2009; Gunstone et al., 2009; Hart, 2008; Jaakkola et al., 2011; Streveler et al, 2008). Streveler et al. (2008) argue that conceptual understanding includes both knowledge on quantity (such as current intensity and potential difference) and knowledge of the relationships between these quantities (Ohm's law, for example).

The Ohm's law introduced in Moroccan school education in the third year of college (14-16 years) gives rise not only to experimental activities aiming the construction of electrical circuits, and the measurement of physical quantities (intensity, voltage, power and electrical energy) by pupils, but also to inductive modeling in order to achieve a functional relationship between physical seize, based on experimental results.

The failure of Moroccan pupils in solving electricity problems is obvious, and their performance is therefore not satisfactory. Hence, some questions may be asked on the pupils' difficulties when solving electricity problems. Is the failure in mastering certaines skills due to the non understanding of electrical concepts (conceptual knowledge) by pupils, to the fact that pupils are unable to solve algorithmic problems, and to absence of mental reflections and strategies? Are pupils “novice problem solvers” who have lack of strategies in electric problem-solving?

An empirical research was conducted on Moroccan collegial pupils during problem solving situations in order to study such difficulties that expect pupils to master certain macro-skills (appropriate, analyze and realize) in relation with other skills (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> degree) involving declarative and procedural knowledge. In this study, the simple and the complex nature of the tasks submitted to pupils will be established.

### **3. Conceptual framework**

During last decades, the teaching-learning has undergone a transformation from a system centred on the transmission of knowledge to

"passive" pupils towards a system that favours learning where pupils become actors in the construction of their knowledge; this transformation does not imply a simple opposition between transmission and learning, and thus between knowledge and skills. Hence, a competent pupil is able to think, to mobilize knowledge, to implement appropriate steps to solve a problem or perform a task. Knowledge and skills are therefore inextricably linked to any learning process.

In our previous work (Ouasri, 2016, 2017a, 2017b, 2017c, 2017d, 2018), we are interested in pupils' knowledge in solving problems of physics and chemistry; while the study of skills in problem solving is recently completed (Ouasri, 2017e). In the present study, knowledge and skills will be combined in the analysis of pupils' difficulties in solving electricity problems. The conceptual framework deals with certain skills that could be used by pupils to perform simple or complex tasks inherent to the given problems; but before, it is useful to briefly recall knowledge, especially from the point of view of cognitive psychology.

### **3.1. Knowledge**

The cognitive psychology has been instrumental in understanding the processes involved in the teaching / learning of knowledge in problem solving (Newell and Simon 1972, Gagné 1985, Glover et al 1990). Knowledge is acquired through a process of three distinct stages: the encoding of declarative knowledge, the proceduralisation of procedural knowledge and the composition or organization (Neves and Anderson, 1981). The procedural knowledge is built over three non-discrete steps, which characterize different moments in evolution of qualitative skills (Anderson, 1983, 1995):

- The cognitive step: the learner identify the needed information to solve problems by following instructions, applying problem-solving operators, and using analogies between declarative knowledge and anterior behaviours.

- The associative step: the declarative representation is transformed into a procedural one, and errors characterizing the cognitive steps are detected and eliminated. The transformation ability, made with little errors, becomes better coordinated and faster.

- The autonomous step: is a step where adjustment and refinement of productions occur.

The ability becomes more automated, faster, and involves little cognitive intervention.

According to Anderson, a skill building is a cumulative process in which pupils should acquire knowledge and be able to apply the right skills according to the situation they would have to deal with. The selection of the

right knowledge depends on an activation process that reflects the frequency of success of a skill in a particular context. Frederiksen and White (1989) proposed a mode of instruction based on decomposition of a task into sub-goals, and on the setting up of situations that allows acquiring progressively the skills related to these sub-goals. These authors showed that learners undergoing this training were more successful in completing tasks than others who completed tasks directly.

### ***3.2. Capacities and skills***

The notion of capacity is inherent to the skill one, which is considered as the ability to use know-how in such situation. The definition of capacity is not dependent of the skill definition, and this implies such difficulties to distinguish the two concepts. Educational institutions use frequently the skill word linked with ability. Meirieu (1988) has defined the capacity as a stabilized and reproducible intellectual activity in various knowledge fields, and the skill as an identified knowledge involving one or more abilities in a notional or a disciplinary field. This suggests that skill is an appropriate combination of different abilities in such situation. Gillet (1991) means by capacity the hypotheses that he forms on what students must develop through learning, and that they will be able to express in situations others than those involving skills.

Hence, a skill is considered as a set of potential behaviours (cognitive, affective and psychomotor), which allows a person to perform a “complex” activity. Linked to a professional or a social situation of reference, a skill includes knowledge, expertise, and know-how. In cognitive terminology, a skill involves simultaneously declarative, conceptual and procedural knowledge, and attitudes, which constitute together a powerful combination at “the expert” level. The terms of skill and capacity are therefore not synonymous. In problem-solving, a skill refers to an individual ability, which would be engaged in cognitive processing to understand, and solve problems without an obvious solution method; the ability includes individual willingness that could be engaged in a situation to exploit his potential as a constructive and thoughtful citizen.

In pedagogy, the problem-solving is similar to a complex task whose solving leads learners to use internal resources (knowledge, skills...) and external resources (documents, help methodologies, protocols, research...). The completion of a task requires learners to master various skills and capacities; the table 1 illustrates some macro-skills and associated capacities (Noirfalise and Porte, 1990).

**Table 1:** Some (appropriate, analyze and achieve) skills, and associated capacities

Skill	Examples of associated capacities
Appropriate the problem (Extract and use wise information)	<ul style="list-style-type: none"> <li>- Make a model sheme.</li> <li>- Identify the relevant physical quantities, assign them a symbol.</li> <li>- Evaluate quantitatively unknown and unspecified physical quantities.</li> <li>- Relate the problem to a known model situation.</li> </ul>
Analyze (Establish a solving strategy)	<ul style="list-style-type: none"> <li>- Break down the problem into simpler tasks.</li> <li>- Start with a simplified version.</li> <li>- Explicit the chosen modeling (system definition, etc ...).</li> <li>- Identify and enunciate the physical laws that will be used.</li> </ul>
Achieve (Implement the strategy)	<ul style="list-style-type: none"> <li>- Lead the process to the end to explicitly answer the question.</li> <li>- To be able to efficiently carry out analytical calculations and numerical translation.</li> <li>- Use dimensionnel analysis.</li> </ul>

When a learner is confronted to a specific question in problem solving, he is led to:

- Articulate the data inherent to the personal experience, to knowledge and to documents. Useful data are not provided by a statement, but can be grouped together at the beginning or the end of the problem-solving activity; there may be missing data that learners would identify, and estimate their value (appropriate and analyze skills).

- Schematize, identify and name quantities, mobilize relevant physical models, to do previsions and/or provide arguments (appropriate and analyze skills).

- Build and implement a strategy that can use experience (analyze and achieve skills).

### 3.3. Tasks and skills

A simple task mobilizes only one capacity, and leads to verify the acquisition of procedures or “know-how”. Hence, the question implies explicitly the domain in which the task would be realized. The restitution of

knowledge is a part of a simple task. Solving complex task did not correspond to application of an automated procedure by pupils, but requires pupils to develop a strategy, and to implement combination of simple, automated, and known procedures, in the way that each pupil can adopt an individual approach to solve the complex task. The task's complexity is linked to others characteristic elements of a task. The transfer of register (moving from a curve to a numerical value, and to a qualitative interpretation, etc.) can be assigned to a question of complex character.

In addition, the task level difficulty has four sub-levels, and depends on the of the pupils' familiarization level with the reasoning. These levels may be described as:

- Level 1: almost non-existent reasoning (simple extraction of information);
- Level 2: reasoning poorly elaborated (direct application of a law, etc.);
- Level 3: reasoning moderately elaborated, in stages with moderate place of formalism;
- Level 4: reasoning elaborated with several parameters, possibly dedicated formalism.

On the other hand, the process on which pupils relies to answer the question can be described in different types of registers:

- Register 1: qualitative reasoning;
- Register 2: literal computation including manipulation of literal expression, dimensional analysis, etc ...;
- Register 3: quantitative reasoning including numerical application, evaluation of a seize order, drawing of a graph or a trajectory, extraction of slope coordinates, etc ...;
- Register 4: symbolic schematization referring for example to the scheme, experimental device, electrical circuit, etc...

Pupils encounter generally difficulties in solving complex tasks. Rey et al. (2003) defined explicitly the task as a human action with purpose and utility. Accordingly, the task can be reduced to an action or extended to a combination of actions, but it differs from the behaviour by its purpose perceived by the subject, which constitutes its unity. Rey et al. (2003) highlight three situations corresponding to three levels of a skill:

- Procedures: Procedural issues involving knowledge and automated rules.

-Elementary skill with framing is used when, faced to novel tasks, necessarily contextualized, a pupil must choose an appropriate procedure; such situation requires interpretation by the pupil.

- Complex skill is necessary to accomplish complex tasks as new situations requiring choice and combination of several procedures. The pupil

must invent the solving process that is not given in instructions; the pupil has to perform an interpretation of the situation that determines his solving approach.

According to Rey et al (2003), a skill is considered as know-how to effectively perform a task, i.e. an action having a purpose; so a skill has three degrees:

- 1<sup>st</sup> degree skill: Know-how to perform an action in response to a preset signal, after training. This is the elementary skill or procedure;

-2<sup>nd</sup> degree skill: Know-how to choose from known procedures the appropriate one to a situation or to an unknown task. This is a basic skill with interpretation of the situation (elementary skill with framing).

- 3<sup>rd</sup> degree skill: Know, among the known procedures, to choose and combine those suitable for an unknown or complex situation or task. This is the complex skill.

Two conditions are necessary to solve complex problems (Rey et al. 2003): the mastery of required procedures to solve tasks, and the ability to determine the relevant traits, needed to solve the proposed task; this last condition refers to the framing.

#### **4. Methodology**

This study aims to analyze knowledge and skills of Moroccan pupils of third year classes of college in electricity problem solving. To do this, the pupils' productions are analyzed by dividing each question of the problems into tasks that would be carried out by these pupils; and then counting responses obtained in terms of successful, failed and untreated tasks (Tables 2-4). The tasks are identified and constructed by breaking down the questions of the problems 1 and 2, 3 submitted to pupils (Appendix); this makes it possible to analyze blockages and errors encountered by pupils during problem solving activities. It is to note that the breaking tasks were not submitted to pupils; they used only in developing analysis. The tasks' analysis is carried out in terms of knowledge (declarative, conceptual and procedural) in relation to the skills (appropriate, analyze, realize) skills, illustrated in Table 1 (Noirfalise & Porte, 1990) and (1st, 2nd and 3rd degree) skills that could be mobilized by pupils to complete these tasks. The methodology adopted here consists in defining the target population, the methods of investigation and the instruments of data collection.

##### **4.1. Target population**

The present study is realized on target population containing 166 pupils (15-16 years) of six classes of third year of college, in two colleges of



Temara city (Al Khawarizmi and Ibn Batouta colleges). The classes' pupils take advantage of 4 hours of physical sciences courses per week (two sessions of two hours). As in all Moroccan colleges, a weekly program of continuous teaching, from 8 h at 6 h, with a pause of two hours from 12:00 to 14:00 h, is adopted within these colleges. This population (common curriculum year) is chosen based on the fact that problem-solving activities are important for pupils at this grade in both continuous assessments and the year-end examination that allow these pupils to proceed to the first year of high schools. The acquisition of certain skills by pupils of this age in solving physical problems is another motivation for the choice of this population.

#### ***4.2. Investigation method and instruments***

The analysis of pupils' written productions when solving electricity problems is made in terms of successful, failed and untreated tasks, accordingly to knowledge and skills that enable pupils to perform these tasks. To do this, we constructed analysis grids (tables 2-4) according to a constructivist approach that consider the questions of problems 1, 2, 3 (Appendix), which reflect the integral part of the third year program of the Moroccan college, concerning Ohm's law, electrical power and electrical energy, respectively.

In tasks' analysis, we identify the competency (s) mobilized (appropriate, analyze, realize) displayed in Table 1. In addition to this, the identification of declarative and procedural knowledge those are necessary to carry out these tasks is carried out. This makes it possible to study the mastery of the skills by the pupils who are confronted with the different difficulties during the resolution of problems.

### **5. Results**

We have decomposed the pupils' productions into simple units, i.e. into tasks (T1, T2,...) to be performed in solving electric problems. Next, we assigned to each task knowledge and skill (s) that pupils should master and mobilize to complete this task. Hence, the tasks' analysis results are given in Table 2 for problem 1, Table 3 for problem 2, and Table 4 for problem 3.

**Table 2:** Results of problem 1: Ohm’s Low study (DK: declarative knowledge, PK: procedural knowledge, Ap: appropriate, An: Analyze, Ac: achieve, Suc: succeeded, Fai: failed, Unt: untreated).

Q	Tasks to be realized	Knowledge		Skills			Suc	Fai	Unt
		DK	PK	Ap	An	Ac			
1	<b>T1:</b> Rewrite clearly the problem’s goal	*	*	+	+		20	22	118
	<b>T2:</b> Give the relationship between the generator voltage and the diode voltage	*		+			20	22	118
	<b>T3:</b> Calculate the voltage		*		+		20	22	118
	<b>T4:</b> Give the Ohm’s low	*		+			150	6	4
	<b>T5:</b> Deduce the relationship of the resistor R		*		+		140	16	4
	<b>T6:</b> Choose the good value of the voltage	*	*	+	+		16	26	118
	<b>T7:</b> Calculate the resistor value		*		+	+	16	26	118
	<b>T8:</b> Choose among the purposed resistors one to be sued.	*	*	+	+	+	8	34	118

**Table 3:** Results of problem 2: Electric power study

Q	Tasks to be realized	Knowledge		Skills			Suc	Fai	Unt
		DK	PK	Ap	An	Ac			
1	<b>T1:</b> Give the relationship between P, I, U	*		+			150	8	2
	<b>T2:</b> Deduce I as function of P et U		*		+		140	18	2
	<b>T3:</b> Convert units accordingly to the international system	*	*	+	+		120	36	4
	<b>T4:</b> Calculate the current intensity that crosses the installation.		*		+	+	118	38	4
2	<b>T5:</b> Give the relationship between U, I, P	*		+			150	8	2
	<b>T6:</b> Calculate the maximal power of the installation		*		+	+	138	12	10
	<b>T7:</b> Give the relationship between the power and the total power	*	*	+	+		142	8	10

3.1	<b>T8:</b> Convert units accordingly to the international system	*	*	+	+		136	14	10
	<b>T9:</b> Calculate the total power		*		+	+	130	20	10
3.2	<b>T10:</b> Give the power of the Iron	*		+			146	4	10
	<b>T11:</b> Add the power of the iron to the relationship between the total power and the power of each device		*		+		142	8	10
	<b>T12:</b> Calculate the total electric power of the installation		*			+	138	12	10
	<b>T13:</b> Give the relationship between the maximal and the total powers	*	*	+	+		122	28	10
	<b>T14:</b> Deduce if you can also use an iron		*		+	+	122	28	10

**Table 4:** Results of problem 3: Electric energy study

Q	Tasks to be realized	Knowledge		Skills			Suc	Fai	Unt
		DK	PK	Ap	An	Ac			
1	<b>T1:</b> Establish the relationship between energy E, the cost of the kilowatt hour Cw and the total cost C	*	*	+	+		130	24	6
	<b>T2:</b> Deduce the expression of energy E		*		+		126	28	6
	<b>T3:</b> Calculate the energy E		*			+	120	34	6
2	<b>T4:</b> Give the relationship between energy E, total power $P_t$ and times t	*		+			128	24	8
	<b>T5:</b> Deduce the expression of the total power		*		+		122	30	8
	<b>T6:</b> Calculate the total power		*			+	120	32	8
3	<b>T7:</b> Write the number of garlands		*		+		90	42	28
	<b>T8:</b> Write the number of bulbs in each garland		*		+		90	42	28
	<b>T9:</b> Deduce the total number of bulbs		*		+		90	42	28
	<b>T10:</b> Give the relationship between the number of bulbs, the total power $P_t$ and power of each bulb P		*		+		74	52	34
	<b>T11:</b> Calculate the power of each bulb		*			+	74	52	34
4	<b>T12:</b> Explain as a sentence the procedure to follow	*	*	+	+		96	24	40
	<b>T13:</b> Convert weeks to days	*	*	+	+		90	30	40
	<b>T14:</b> Establish the relationship between cost and duration of a single day with cost and duration of three weeks	*	*	+	+		82	38	40
	<b>T15:</b> Deduct the amount paid by the family		*		+	+	78	42	40

## 6. Analysis and discussion

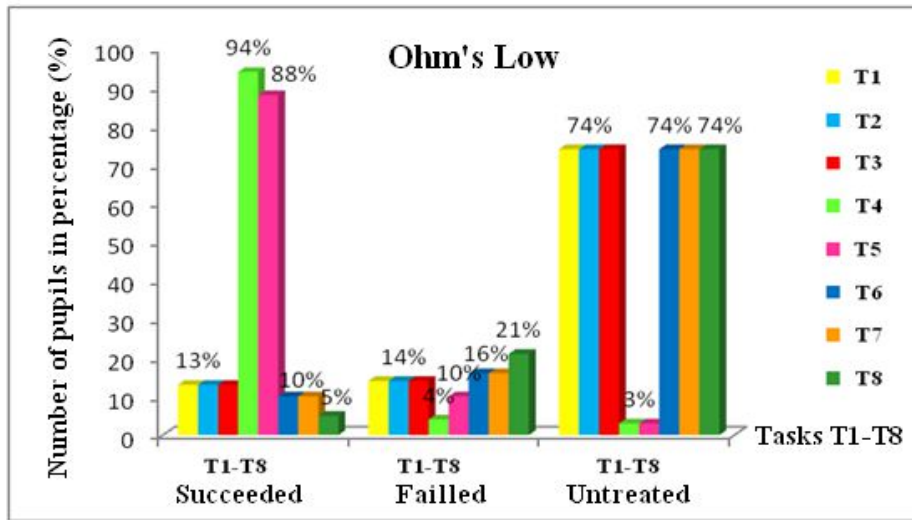
The analysis of the results consists of counting the successful, failed and untreated tasks from the pupils' written problem-solving work, then identifying these tasks according to whether their answer requires declarative, procedural knowledge in relation to the skills (appropriate, analyze, achieve) and those named (1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> degree) skills. It is important to correlate the macro-skills as identified by Noirfalise and Porte (1990) with those determined by Rey et al. (2003) as skills of three degree. In this analysis, we admit the following correlation: (appropriate → 1<sup>st</sup> degree skill, analyze → 2<sup>nd</sup> degree skill, and achieve → 3<sup>rd</sup> degree skill). To better analyze the tasks, we transformed the data in Tables (2-4) into graphs (Figures 1-3) using the Excel software.

### 6.1. Analysis in terms of tasks

We admit on the one hand the correlations between declarative knowledge and (appropriate) skill, and on the other hand between procedural knowledge and (analyze and achieve) skills. Then, we identify the skills in relation with the simplicity or the complexity of the tasks to be carried out, i.e. we carry out an analysis in terms of skills of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> degrees, based on what is described in the conceptual framework.

#### 6.1.1. Problem 1: Skills related to the Ohm's Law

The percentage representation (%) of pupils that succeeded, failed and did not treat the tasks of the problem 1 concerning the Ohm's Law is given in Figure 1. This problem contains only one open question whose resolution requires pupils to complete eight tasks that involve certain knowledge and skills.



**Figure 1.** Performance of pupils in realizing tasks related to apprehension and application of Ohm's Law (problem 1).

The first three T1-T3 tasks were succeeded with a low score, 12.5% (20 pupils from 160); this shows that the majority of pupils could not apprehend and calculate the difference between the generator voltage and that of the diode. Failure in these relatively complex tasks implies that pupils, at this grade level, have difficulties either to mobilize knowledge and procedures (1<sup>st</sup> degree skill), but also elementary skills “procedures with framing” (2<sup>nd</sup> degree skill), which could be mobilized when, faced with an unprecedented task, necessarily contextualized, the pupils must choose the appropriate procedure.

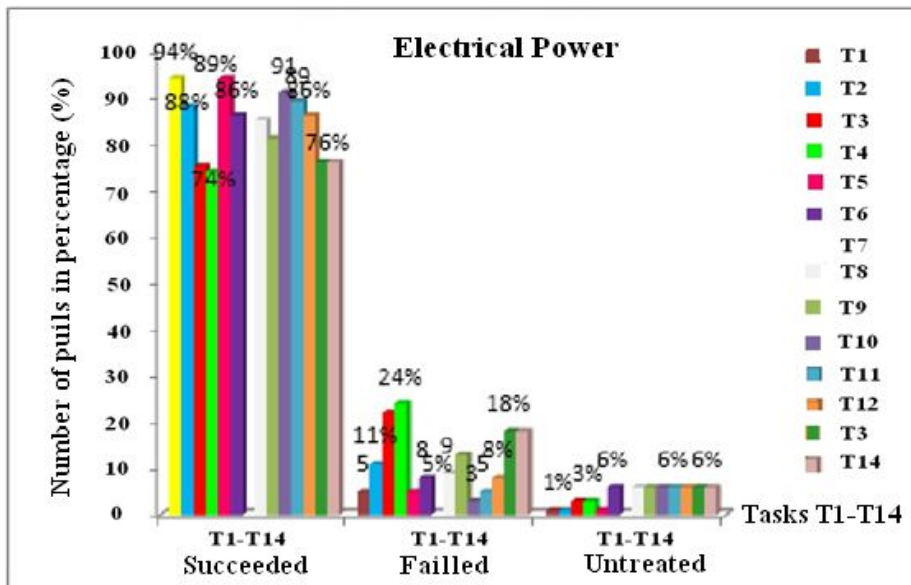
The Task T4 succeeded at 94% (pupils) mobilizes only (appropriate) pupils' skill, i.e. declarative knowledge of Ohm's law; this skill refers to procedures (1<sup>st</sup> degree skill). The T5 task completed at 89% (140 pupils) requires pupils to mobilizes their (analyze) skill; this elementary skill considered as of 2<sup>nd</sup> degree refers to elementary skill named “procedures with framing”, i.e. a procedural knowledge that allows deducing the resistor from the application of Ohm's law.

The T6-T8 tasks completed at 10% (16 pupils), 10% and 5% (8 pupils), respectively, aim to calculate and choose among the purposed resistors the one to be used, based on a clear choice of the good value of the voltage. Task T6 requires pupils to mobilize (appropriate and analyze) skills involving declarative and procedural knowledge about the choice of a voltage; these skills refer to procedures (1<sup>st</sup> degree skill) and procedures with framing (elementary skill of the 2<sup>nd</sup> degree). The task T7 requires the mobilization of procedural knowledge, i.e. the mastery of the (analyze and

achieve) skills that refer to the skills of the 2<sup>nd</sup> skills (procedures with framing) and 3<sup>rd</sup> degree skills (complex skills). The success of the task T8, assumed to be complex, requires pupils to master elementary and complex skills. To accomplish the complex tasks, pupils should make a choice and a combination of several procedures. The failure in these three complex tasks, in particular T8 task, shows that pupils at this level of education find it difficult to mobilize not only knowledge, but also the complex skills which (of 3<sup>rd</sup> degree), which consists in knowing how to choose and to combine, among known procedures, those suitable for an unknown and complex task.

**6.1.2. Problem 2: Skills related to electric power**

The percentage representation (%) of pupils that succeeded, failed and did not treat the tasks of the problem 2 concerning the electrical power is given in Figure 2. This problem contains four questions whose resolution requires pupils to realize 14 tasks that involve certain knowledge and skills on electric power.



**Figure 2:** Performance of pupils in realizing tasks related to apprehension and application of electric power (problem 2).

The first question 1 corresponds to four tasks that aimed to calculate the intensity of the current flowing through the installation by applying the relationship between P, I and U; these tasks were succeeded at 94% (150 pupils), 88% (140 pupils), 75% (120 pupils) and 74% (118 pupils)

respectively. The T1 task completed with a higher score require the pupils to mobilize (appropriate) skill corresponding to a declarative knowledge about the relationship between P, I and U. The T2 task realized also with a high score mobilizes at pupils (appropriate and analyze) skills in relation to declarative and procedural knowledge allowing to express the current I as a function of P and U. The T3 and T4 tasks completed with comparable and relatively high scores require pupils to master (appropriate, analyze, realize) skills, with declarative and procedural knowledge concerning as well as the conversion of units into accordingly to the international system and the numerical calculation of the intensity of the current flowing through the installation. For T1-T4 considered as simple tasks, it can be said that the majority of pupils (74-94%) were able to mobilize successfully procedures (1<sup>st</sup> degree skills) and procedures with framing (elementary skills referring to 2<sup>nd</sup> degree skills) to complete these simple tasks, which do not require enough thought and strategy to be successful.

The second question contains T5 and T6 tasks that were succeeded at 94% (150 pupils) and 86% (138 pupils), respectively. These scores are comparable to those achieved in similar T1 and T2 tasks that required pupils to master and mobilize the same knowledge and skills.

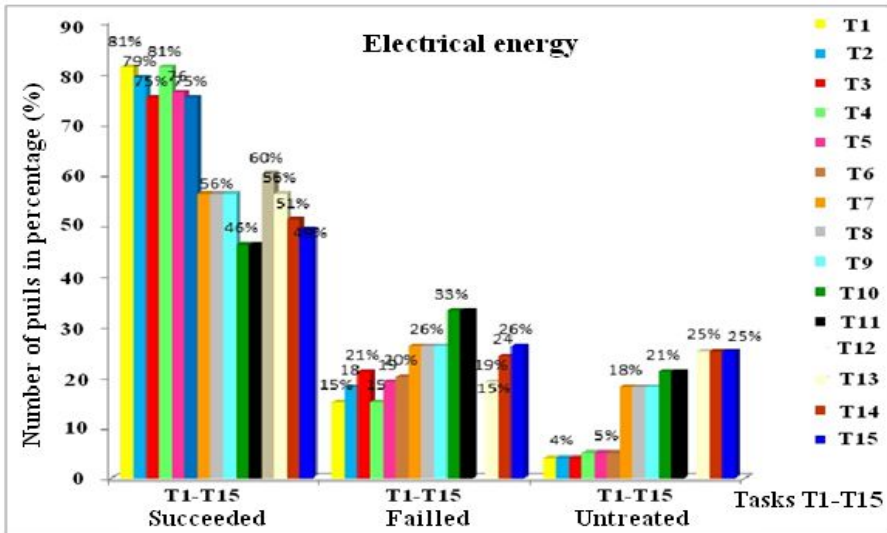
The T7-T9 tasks of question 3, were completed with high scores 89% (142 pupils), 85% (136 pupils) and 81% (130 pupils), respectively. These tasks aim to calculate the total power by applying the relationship between power and total power. The task T7 requires students to master declarative and procedural knowledge on the relationship between power and total power; the high success score of this simple task implies that the majority of pupils master the (appropriate, analyze) skills, i.e. the 1<sup>st</sup> degree skills (procedures) involving declarative knowledge, and basic skills of 2<sup>nd</sup> degree (procedures with framing) referring to procedural knowledge. The T8 and T9 tasks completed also with relatively high scores mobilize (appropriate, analyze, perform) pupils' skills that are based on declarative and procedural knowledge about the conversion of units accordingly with the international system, and about the numerical calculation of total power. Hence, we can said that the majority pupils have been able to mobilize successfully first-level and second-level skills in order to carry out these simple tasks, which do not require enough thought and strategy to be successful.

The question 3.2 corresponds to T10-T14 tasks that have been succeeded with high scores 91% (146 pupils), 89% (142 pupils), 86% (138 pupils), 76% (122 pupils) and 76% (122 pupils), respectively. These tasks are intended to determine whether the subscriber who operates an electric oven (230V-44kW), two radiators (230V-900W), and four incandescent lamps (230V-100W) may additionally use an iron (230V-1000W). The Task T10 evokes a declarative knowledge about the meaning of the iron indices

(V, W), which explains the important score of its realization. The successful completion of other tasks requires pupils to appropriate declarative and procedural knowledge on calculation of total power, and on its comparison with the maximal power in order to deduce whether the iron could be added. The high success scores of these tasks implies that the majority of the pupils master as well as (appropriate) skills considered as the 1<sup>st</sup> degree skills, and (analyze, realize) skills that refer to elementary skills of 2<sup>nd</sup> degree (procedures with framing) and to 3<sup>rd</sup> degree (complex skills), respectively. Achieving these tasks implies that pupils master analysis, comparison, deduction, and calculation the skills that allow them to develop strategies and logical thinking when solving problems on electrical power and its use in their daily life.

**6.1.3. Problem 3: Skills related to electric energy**

The percentage representation (%) of pupils that succeeded, failed and did not treat the tasks of the problem 3 concerning the electrical energy is given in Figure 3. This problem contains four questions whose resolution requires pupils to realize 15 tasks that involve certain knowledge and skills on electric energy



**Figure 3:** Performance of pupils in realizing tasks related to apprehension and application of electric energy (problem 3).

The first question involves T1-T3 tasks that were succeeded with relatively high scores, 81% (130 pupils), 79% (126 pupils), and 75% (120 pupils) respectively. The success of these tasks requires pupils to master (appropriate, analyze and achieve) skills involving declarative and



procedural knowledge, which allow them to calculate the energy  $E$  by establishing the relation between the energy  $E$ , the cost of the kilowatt hour  $C_w$  and the total cost  $C$ . The high success score observed for these tasks considered as relatively simples means that most pupils do not have difficulties in performing these tasks, and then mastering procedures skills of 1<sup>st</sup> degree, elementary skills (procedures with framing) of 2<sup>nd</sup> degree, and complex skills of 3<sup>rd</sup> degree.

Tasks T4-T6 (second question) were succeeded with relatively high scores: 77% (122 pupils), 75% (120 pupils), and 75% (120 pupils), respectively. Hence, the pupils do not have difficulties in mastering the different skills (appropriate, analyze and achieve) based on declarative and procedural knowledge allowing to deduce and calculate the total power by using the relation between the energy  $E$ , the total power  $P_t$  and the time  $t$ . It is to note that these pupils master skills of different degree.

Question 3, which aims to calculate the power of each bulb, refers to five procedural tasks among them T7-T9 are succeeded at 56% (90 pupils), and T10-T11 at 46% (74 pupils). Hence, about the half of pupils are found to have difficulty in mastering the (analyze) skills to use the problem data to deduce the relationship between the number of bulbs, the total power  $P_t$  and that of each bulb  $P$ , and also (achieve) skills to perform the numerical calculation of the power of each bulb. For these tasks, only half of pupils master elementary skills (of 2<sup>nd</sup> degree) and complex skills of 3<sup>rd</sup> degree.

Question 4 corresponds to four tasks (T12-T15) succeeded at 60% (96 pupils), 56% (90 pupils), 51% (82 pupils), and 49% (78 pupils), respectively. These tasks aimed to determine the cost disbursed by the family to use all bulbs for three weeks; this may done by establishing a relationship between the cost and the duration of a single day with the cost and duration of three weeks. To complete these tasks, pupils are required to master (appropriate, analyze and achieve) skills, which involve declarative and procedural knowledge. The achievement scores of these tasks imply that about half of the pupils master skills of 1<sup>st</sup> degree (procedures), elementary skills of 2<sup>nd</sup> degree (procedures with framing), and complex skills of third degree.

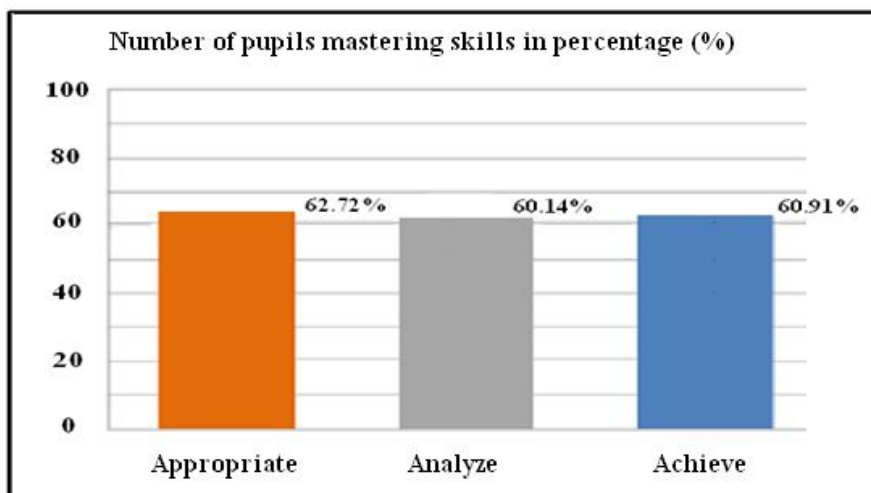
## **6.2. Knowledge and skills analysis**

In this part, we analyze the success of pupils in solving tasks, which depends on their ability to mobilize knowledge and (appropriate, analyze and achieve) skills that pupils have to master in solving electrical problems, with recourse to associated capacities (Noirfalise & Porte, 1990). Table 5 shows the total number of skills assigned to various tasks inherent to the three problems, the average number of pupils mastering each skill, and the average percentage of the skills' success. The analysis is developed based on the skills' categories as have been defined by Rey et al. (2003).

The three problems (Appendix) contain 37 tasks, identified in Tables 2-4. Among the total tasks, 17 are considered as tasks requiring pupils to master appropriate skills, 27 as tasks corresponding to analyze skills, and 11 as tasks that are related to achieve skills. It is to note that only succeeded tasks were considered in the presented results. The representation of the results is given in Figure 4.

**Table 5:** Average percentage of success of (appropriate, analyse and achieve) skills inherent to purposed electrical problems

Skills	Total number of skills	Average number of pupils mastering skills	Average percentage of mastering skills (%)
Appropriate	17	100.35	62.72
Analyse	27	96.22	60.14
Achieve	11	97.46	60.91



**Figure 4:** Representation of pupils mastering different skills in terms of percentage (%).

The results show that 17 (appropriate), 27 (analyze) and 11 (achieve) skills were successfully mobilized by pupils to success completely the various tasks related to the three purposed problems. Hence, the pupils have succeeded appropriate skills at an average score of 62.72% (100.35/160),

analyze skills at 60.14% (96.22/160), and achieve skills at 60.91% (97.46/160).

Except the problem 1 containing only one open question with implicit tasks, considered as complex as has been indicated from the success percentage of implicit tasks, the two other problems are considered as simple, since they are constructed of questions, which enable the pupils to realize tasks during problem solving. Considering the simplicity or complexity of tasks, we consider that pupils' performance in solving these problems is medium, and not enough satisfactory. Validation percentages show that pupils are more proficient in appropriate skills than in analyze and perform skills during solving electrical problems; this result seems to be provided and normal.

Taking into account the validation percentages, we find that more than half of the pupils were able to master:

- Appropriate skills and certain associated capacities, by making a model scheme of problem solving, identifying the physical quantities with their symbol, and thus connecting the problem to a known model situation.

- Analyze skills with associated capacities, by decomposing the problem into simple tasks, explaining the chosen modeling (system definition ...), and enunciating the physical laws that could be used. Hence, these pupils seem to have reasoning attitudes that allow them to build problem-solving strategies.

- Achieve skills and associated capacities, by developing an approach that leads to answer explicitly the asked questions, and by carrying out efficiently analytical and numerical calculations.

Considering the macro-skills as identified by Noirfalise and Porte (1990), and skills of three degree as determined by Rey et al. (2003), and based on the purposed correlation: (appropriate → 1<sup>st</sup> degree skill, analyze → 2<sup>nd</sup> degree skill, and achieve → 3<sup>rd</sup> degree skill), one can conclude that more than half of the pupils were able to master:

- 1<sup>st</sup> degree skills, as elementary skills involving knowledge (declarative and conceptual knowledge), and automated rules in electrical problem-solving.

- 2<sup>nd</sup> degree skills, as elementary skills with interpretation, which allow pupils to choose an appropriate procedure (procedural knowledge) to solve electrical problems.

- 3<sup>rd</sup> degree skills, i.e. complex skills needed to accomplish complex tasks, which enable pupils to do choice and combination of several procedures to solve complex tasks considered as new situations for pupils

In the end, we can say that several pupils have failed to master the studied skills. This implies these pupils encounter difficulties, errors and

blockages in performing certain tasks related to the purposed problems, especially the complex tasks of problem 1 which involves skills considered of second and third degree. The results' analysis reveals a decreasing in percentage of pupils achieving relatively complex tasks, at the end of problems, which require combination between strong base of knowledge and strong base of skills

The validation of a skill cannot be done only by mastering declarative and procedural knowledge (procedural, framing procedures: 2<sup>nd</sup> degree skills). This implies a mastering level of a capacity in a particular context of the class. Considering the relationship between knowledge, abilities and attitudes, a skill is conceived in the tasks' complexity, as in the case of the problem 1, where the majority of pupils cannot realize these tasks with success; this can be explained by different reasons such as:

- Understanding lack of physical language, and concepts (conceptual understanding), difficulties to exploit laws and physics principles, etc...

- Lack of mental representations or the inability to develop schemes, which enhance pupils to solve electrical problems (procedural knowledge). Several pupils did not categorize some implicit tasks to elaborate the appropriate scheme that would allow them to complete successfully the complex tasks.

- Lack of strategies and logical reflexes (algorithms) that enhance pupils to organize and arrange declarative, conceptual and procedural knowledge in logical way to answer asked questions.

## **7. Conclusions**

This study aims to cross analysis in terms of the knowledge and skills mobilized by the Moroccan pupils (15-16 years) of the second year of the college during the activities of solving electricity problems. Methodologically, the written productions of novice problems solvers learners, which have been administered to problem solving activities, were analyzed and discussed. The analysis focuses on knowledge and skills that could master the pupils to perform various tasks in solving electricity problems involving Ohm's Law, electrical power, and electrical power.

The pupils' difficulties were discussed in terms of appropriate, analyze and achieve skills (First, second and third skills degree) that pupils could master to complete implicit tasks of the purposed electrical problems. Generally, pupils were found to be able to mobilize appropriate skills more than (analyze and achieve) ones, and to have difficulties to perform tasks considered as complex at the end of problems.

For the first open problem containing one question with implicit complex tasks, pupils encounter difficulties to complete these tasks, as has been shown by a clear decrease in the number of pupils validating the

different skills. For the other two problems built with explicit questions, pupils have relatively succeeded to mobilize skills (appropriate, analyze and achieve) skills, i.e. (1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> degree) skills involving declarative, conceptual and procedural knowledge.

### References:

- Anderson, J. R. (1983). *The architecture of cognition*. Cambridge, Massachusetts: Harvard University Press.
- Anderson, J. R. (1995). *Learning and memory: An integrated approach*. New York: John Wiley & Sons.
- Başer, M., & Durmuş, S. (2010). The effectiveness of computer supported versus real laboratory inquiry learning environments on the understanding of direct current electricity among pre-service elementary school teachers. *Eurasia Journal of Mathematics, Science and Technology Education*, 6, 47-61.
- Başer, M., & Geban, Ö. (2007). Effect of instruction based on conceptual change activities on students' understanding of static electricity concepts. *Research in Science & Technological Education*, 25, 243-267.
- Crahay, M. & Lafontaine, D. (1986). *L'art et la science de l'enseignement* : Bruxelles: Labor.
- De Ketele, J.-M. & Gerard, F.-M. (2005). La validation des épreuves d'évaluation selon l'approche par les compétences ; *Mesure et Evaluation en Education*, Volume 28, n°3, 1-26.
- Dumas-Carré, A. & Goffard, M. (1997). *Rénover les activités de résolution de problème en physique. Concept et démarches*. Paris: Armand Collin.
- Frederiksen, J., & White, B. (1989). An approach to training based upon principled task decomposition. *Acta psychological*, 71, 89-146.
- Giordan, A. (1998). *Une didactique pour les sciences expérimentales*. Belin.
- Gillet P. (dir.) (1991). *Construire la formation*, ESF éditeur.
- Glauert, E. B. (2009). How young children understand electric circuits: Prediction, explanation and exploration. *International Journal of Science Education*, 31, 1025-1047.
- Glover, J. A., Ronning, R. R. and Brunning, R. H. (1990). *Cognitive psychology for teachers*. New York: Macmillian Publishing Company.
- Goffard, M. (1994). *Le problème de physique et sa pédagogie*. Paris: ADAPT.
- Goffard, M. & Goffard, S. (2003). Interactions entre élèves et résolution de problèmes. *Aster*. 37, 165-187.
- Hart, C. (2008). Models in physics, models for physics learning, and why the distinction may matter in the case of electric circuits. *Research in Science Education*, 38, 529-544.

- Jaakkola, T., Nurmi, S., & Veermans, K. (2011). A comparison of students' conceptual understanding of electric circuits in simulation only and simulation-laboratory contexts. *Journal of Research in Science Teaching*, 48, 71-93.
- Jill H. Larkin & F. Reif (2007). Understanding and Teaching Problem-Solving in Physics, *European Journal of Science Education*, 1(2), 191-203.
- Jonnaret, P. (2002). *Compétences et socioconstructivisme – un cadre théorique*. Bruxelles : De Boek.
- Malafouse, D., Lerouge, A. & Dusseau, J-M. (2001). Etude en interdidactique des mathématiques et de la physique de l'acquisition de la loi d'Ohm au collège : changement de cadre de rationalité. *Didaskalia*. 18, 61-98.
- Mazouze, B. (2011). Raisonnements et difficultés des élèves en résolution de problèmes de physique : cas des interférences mécaniques. *BUPPC*, 931, 221-241
- Mazouze, B. (2016). Des difficultés en résolution de problèmes de physique: quelles aides pour les élèves? *Educational Journal of the University of Patras UNESCO Chair*, 3(2), 258-268.
- Mazouze, B. & Lounis, A. (2015). Résolution de problèmes et apprentissage des ondes : quels types de difficultés rencontrent les élèves? *Review of Science, Mathematics and ICT Education*, 9(2), 25-40.
- Meltzer, D. E. (2005). Relation between students' problem-solving performance and representational format, *American Journal of Physics*, 73(5): 463–478.
- Meirieu J. (1988). *Apprendre, oui, mais comment?*, ESF éditeur.
- Neves, D. M. & Anderson, J. R. (1981). *Knowledge compilation: Mechanisms for the automatization of cognitive skills*. In J. R. Anderson (Ed.), *cognitive skills and their acquisition* (pp, 86-102). Hillsdale, NJ: Erlbaum.
- Newell, A. & Simon, H. A. (1972). *Human Problem Solving*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Ntalakoura, V. & Ravanis, K. (2014). Changing preschool children's representations of light: a scratch based teaching approach. *Journal of Baltic Science Education*, 13(2), 191-200.
- Orange, C. (2005). Problème et problématisation dans l'enseignement scientifique. *Aster*, 40, 3-11.
- Ouasri, A. (2016). Study of the appropriation by the pupils of second Baccalaureate year of knowledge objectifs relating to acide-bases titrations. *Chemistry: Bulgarian Journal of Science Education*, 25(5) 695-717.
- Ouasri, A. (2017a). Analyse des difficultés des élèves de deuxième année Baccalauréat marocain en résolution de problèmes de Mécanique;

- Educational Journal of the University of Patras UNESCO Chair*, 4(2), 39-57.
- Ouasri, A. (2017b). Analyse des connaissances des de troisième année du collège marocain en activités de résolution de problèmes de l'électricité (loi d'Ohm, puissance et énergie électrique); *European Journal of Education Studies*, 3(7), 94-120.
- Ouasri, A. (2017c). Study of Moroccan pupils' difficulties at second Baccalaureat year in solving chemistry problems relating to reactivity of ethanoate ions and to Copper-Aluminium cell; *Chemistry Education Research and Practice*, 18, 737-748.
- Ouasri, A. (2017d). Analyse des difficultés des élèves marocains de 15-16 ans en résolution de problèmes de mécanique (mouvement et repos, interactions mécaniques et forces, poids et masse). *Review of Science, Mathematics and ICT Education*, 11(1), 69-92.
- Ouasri A. (2017e). Konstantinos Ravanis; Analyse des compétences des élèves de Tronc Commun marocain en résolution de problèmes d'électricité (Dipôles actif et passif); *European Journal of Education Studies*, 3(11), 1-28.
- Ouasri Ali, EL Mhammedi Moulay Abderrahim (2018). Observation et analyse des difficultés des élèves de première année Baccalauréat marocain en résolution de problèmes de Physique-chimie. *Slavonic Pedagogical Studies Journal*, 7(1) 178-200.
- Perrenoud, P. (1997). *Construire des compétences dès l'école*. Paris : ESF.
- Ravanis, K. (2010). Représentations, Modèles Précurseurs, Objectifs-Obstacles et Médiation-Tutelle: concepts-clés pour la construction des connaissances du monde physique à l'âge de 5-7 ans. *Revista Electrónica de Investigación en Educación en Ciencias*, 5(2), 1-11.
- Rey B., Carette V., Defrance A. & Kahn S., (2003). *Les compétences à l'école. Apprentissage et évaluation*. Bruxelles: De Boeck.
- Richard, J-F. (1990). *Les activités mentales*. Paris: Armand Collin
- Rozenwajg, P. (1997). Approche des différences individuelles dans la résolution de problèmes concernant des circuits électriques simples. *Didaskalia*, 10, 7-27.
- Streveler, R. A., Litzinger, T. A., Miller, R. L., & Steif, P. S. (2008). Learning conceptual knowledge in the engineering sciences: Overview and future research directions. *Journal of Engineering Education*, 97, 279-294.
- Sweller, J. (2003). Evolution of human cognitive architecture. In B. Ross (Ed.), *The psychology of learning and motivation* (Vol. 43, pp. 215-266), San Diego: Academic Press.
- Tardif, J. (2006). *L'évaluation des compétences-Documenter le parcours de développement*. Montréal: Chenelière Education.

## Appendix

### Problem 1

A woman has several electrical devices: an LED whose operating voltage is 2V, a DC generator of 6V, and three resistors of  $330\Omega$ ,  $220\Omega$ , and  $180\Omega$ .

Knowing that the intensity of the current passing through the diode is 20mA; can you help this woman so that she can choose from the three resistors, the one that can be used with the diode?

### Problem 2

An electrical installation has a circuit breaker calibrated at 30A. It operates under 230V voltage.

1. The power fixed by a subscriber is 6kW. How much intensity can he have?
2. How much power does the subscriber really have in his installation with the circuit breaker calibration?
3. The subscriber operates at the same time an electric oven (230V- 44kW), two radiators (230V-900W), and four incandescent lamps (230V-100W).
  - 3.1. What power does he use?
  - 3.2. Can he also use an iron (230V-1000W)? Justify your answer.

### Problem 3

A family wants to decorate the outside of their home with two garlands of 160 bulbs each; it costs him 35 DH (1USD = 10DH) per day for 4 hours of daily operation.

- 1) Calculate the energy transformed by the lamps each day. The price per kilowatt hour is 1.5 DH.
- 2) Deduce the power transformed by the all the lamps.
- 3) Calculate the power of a lamp assuming that all lamps are identical.
- 4) How much will this family have paid for this lighting if it decorates his house for 3 weeks?



## **ABILITIES AND SKILLS IN FIELDS OF SOCIAL WORK – CONCEPTS AND EMPIRICAL RESULTS**

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**Abstract:** *In the study programs of bachelor of social work there are different concepts to define abilities and skills as desirable outcomes of the successfully mastered curriculum. In Germany the curricula are based on a generalized “German Qualifications Framework of Social Work”. Two studies are presented to find out, (1) how alumni evaluate the relevance of different aspects of competencies, (2) how these evaluations changes during the first two years after leaving university and (3) how the higher education in social work affects the ability of the alumni to evaluate critical situations in relation to appropriate skills.*

**Keywords:** *Social work; ability; competence; skill; study program; practicum; EQR;*

### **Introduction**

Higher education in social work has changed significantly in recent years. The graduated bachelor and master study programs are no more defined by study contents, but rather by basic vocational qualifications. Graduates of study should learn in a competency-oriented way. They have to prepare themselves for a process of lifelong learning. These changes go hand in hand with the hope that the transition from university to employment for graduates can be accomplished with less difficulty than before. Already the study should contain not only theory, but also pre-vocational parts and ideally combine theoretical teaching with professional practice. This is in contrast to the previous understanding of higher education, which focused primarily on the teaching of theories and expertise (Moch 2009; Treptow 2011).

One very basic concept for education and training was established as the European Qualification Framework (EQF). This concept divides the basic qualifications in general as: „knowledge“, „skills“ and „responsibility an autonomy“ (Europaen Commission 2018). These three areas of

qualification are specified on eight levels beginning from elementary skills at school up to the doctorate level. Bachelor is situated at the level 6. The keywords on this level are:

(1) “Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles.” (2) “Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialized field of work or study.” (3) “Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups.” (Europaen Commission 2018) (Highlighted by the author)

As a result of this discussion, also in the field of social work, was a reorientation of the study programs in the sense of concrete learning outcomes. The development of modular curricula has to be oriented to specific qualifications, which alumni should have achieved at the end of their study. As an attempt to refer to the principles of the German Qualifications Framework (DQR) on the professional field of social work, the German Board of the Faculties of Social Work (Fachbereichstag Soziale Arbeit) lined out a „Qualifications Framework Social Work (QR SArb)“ (Schäfer & Bartosch 2016) as a framework for the Bachelor of Arts in Social Work. This framework includes seven headlines of basic qualifications on level 6 of the EQF:

- Knowledge and Understanding
- Description, Analysis and Valuation
- Planning and Conceptualisation
- Investigation and Research
- Organisation, Practice and Evaluation
- Professional Skills and Mindset
- Personality and Attitudes

All study programs of Social Work in Germany should define their learning outcomes in relation to these basic catalogue of abilities.

Studies and research questions

The categories of the German Framework define the abilities on an abstract level. Moreover there is no evidence about the specific relevance of each skill in the fields of professional social work. Our interest and research aim was to find out, whether the alumni as well as the professional social workers estimate these basic qualifications as relevant for their actual study and field practice.

During the last 15 years all in a whole we undertook three large projects on the theme of qualification and abilities of alumni of social work.

(1) One did focus on the early professional biographies of alumni in Social Work (Moch 2013). (2) The second deals with the connection between personal competencies and institutional conditions (Moch 2018). (3) The third - just ongoing – study is about achieving qualifications in field-practice as part of the study program (Moch 2007, 2009; Moch & Aparicio 2016).

In this article we report some results of the studies 1 and 2. In general we asked three questions: (1) Which abilities and skills do/should the alumni achieve by the bachelor study program of social work? (2) Does the study program qualify the alumni in relation to the challenges of the professional field practice? (3) How does the education of the alumni at the university influence the evaluation of critical situations? Our hypothesis was, that there would be a development through higher education at the university as well as through practice field experiences, which influence the valuation of necessary and adequate skills.

## Methods

For study 1 we formed a questionnaire with specific items in relation to the seven qualification headlines of the German Qualification Framework of social work (as seen before). Then we started our assessment with 200 alumni, who had finished our study program and who were just employed in an institution of social work. We assessed our data in three consecutive points in time: Three month after leaving university, 15 month after leaving university and 27 month after leaving university.

For study 2 we worked out a questionnaire to evaluate how the social workers realize different aspects of critical situations, which should be managed in a proper way. Social workers with many years of experience in foster-care institutions were asked to evaluate each of 16 specific situations on 16 different ability-scales.

## Results

First we look at the assessments of the relevance of abilities from the perspective of the alumni. Figure 1 shows the evaluations of the alumni and their changes over time on a scale from 1 (= high relevance) to 18 (low relevance). Most important for the alumni was the item „personality“. This means aspects as: a stable, resilient and well-balanced personality with a pronounced sense for social tasks, independent in their definition of the limits and opportunities of their own actions. Second was the item: „Professional skills and mindset“. That means specific skills to work initiatively, to have responsibility / awareness of the risks of acting, willingness to continuously educate and update one's knowledge. At the lower end we find managing the organization and research.

Figure 1: Alumni's evaluation of relevance of basic abilities - Developments after leaving university (N= 132; 98; 57)

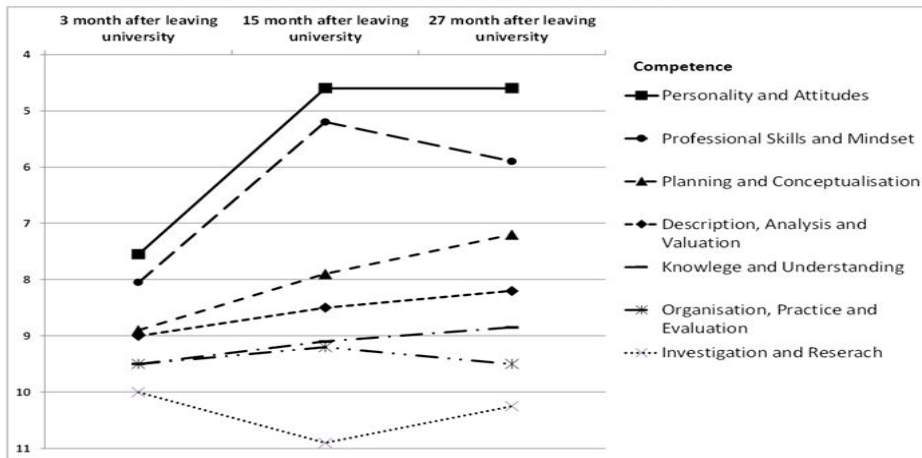


Fig.nr.1

The chart shows the development of the evaluations in the first 27 month of employment. It is to be noticed that the ranking of the seven dimensions has remained constant over the period of 2 years on the job. But: Over the first 27 months of work, the spectrum of these weightings has spread: some dimensions are increasingly important over time, others remain constant or even lose importance. As we can see, the relevance of „personality and attitudes“ increased clearly as the most important prerequisite for successful professional practice. Similarly, “professional skills and mindset” are seen as central competencies. In the middle range are skills related to planning / concept development, description, knowledge and organization. Research and research play a subordinate role.

Both dimensions of personality and professional attitudes, which are already important at the beginning, continue to gain high significance over the first 15 months of work. In the planning area, skills such as concept development, interdisciplinary work and concept implementation experience a continuous (and statistically meaningful) increase in significance over the period of study presented.

Other skills such as description, analysis, identification of tasks and method selection remain constant in their assessment, as well as the weight of theoretical and methodological knowledge, which is rated only two-and-a-quarter years after starting work insignificantly higher than immediately after graduation. At the bottom of the spectrum are organizational skills such as developing new resources, methodologically supported investigation and research.

We did not only analyze the theory-related abilities, but also the skills, which are relevant in professional field practice (s. figure 2). Here we found,

that abilities are emphasized, which also are highlighted in the European Qualifications framework! “Work in unpredictable circumstances and ability to respond to those in a properly way”. (scale 1 (= high relevance) to 6 (low relevance)).

Figure 1: Alumni’s evaluation of relevance of basic abilities - Developments after leaving university (N= 132; 98; 57)

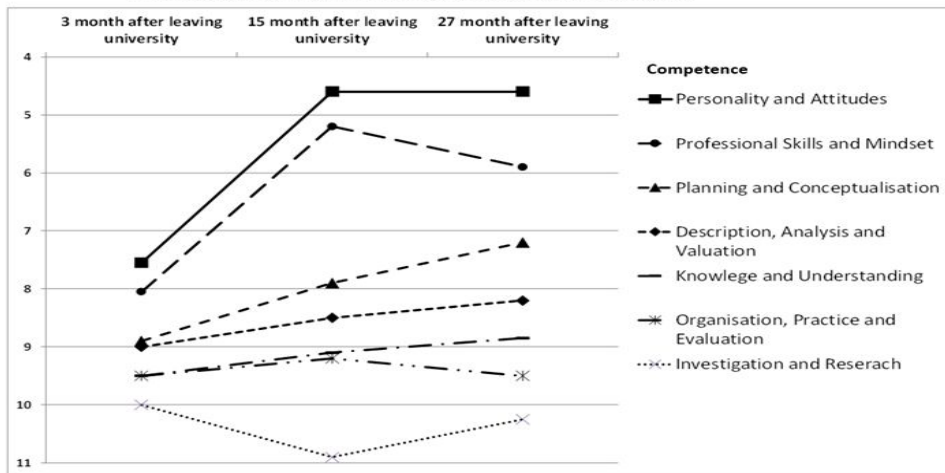


Fig.nr.2

Furthermore there were relevant topics: “Motivation others” and “working in teams”! These abilities were assessed as increasing very much in relevance during the first two years on the job. Once more the alumni underestimated the importance of scientific methods (see at the bottom). They also neglected intercultural aspects.

In a very new study we examined the professional strategies of social workers in every-day situations in institutions of child foster-care. We wanted to find out, how the social workers think about specific abilities, which they need to overcome critical situations. The participants of this study had to answer to 16 different vignettes of situations. The question was: „What do you think? Which abilities are necessary to manage this situation properly?“ There were 16 ability-scales to be filled in for each situation.

To evaluate the data we used a form of „correspondence analysis“, in which differences of estimations can be showed as distances in a two-dimensional chart (Backhaus et al. 2011). The distance between two points can to be understood as how different the abilities were estimated referring to the situations in question.

Figure 3: Correspondence analysis: Distribution of evaluation of different situations in relation to required abilities by level of education (N = 48)

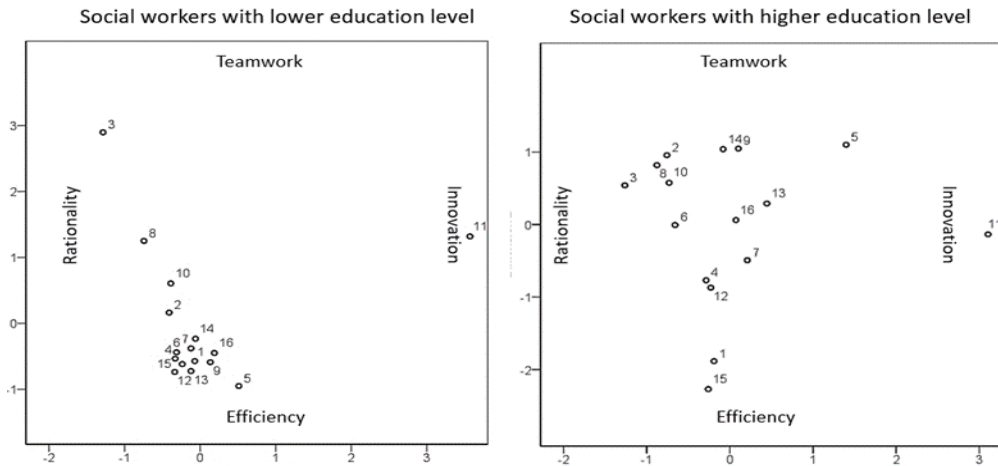


Fig.nr.3

Each point in figure 3 represents an evaluated situation (as mean of 24 individual estimations of the subsample). The distribution of the points shows the workplace diversity of the estimated situations related to the appropriate abilities. The dimensions of the charts are labeled with terms, which correspond in a higher abstract way to the estimated competencies. For this presentation we reduced the complexity of the model to four dominant dimensions: „Rationality“; „Innovation“, Teamwork“ and „Efficiency“.

We compared two groups of social workers: One group with lower qualifications (underneath university level) and the other group with higher qualification level (university level). As we can easily see, social workers with a lower qualification level estimated the 16 situation in a very narrow stretch near the dominant dimension of efficiency (coordinates 0/-1). Only some situations are estimated as related to teamwork and rationality.

In contrast to this result we can see the distribution of the estimations of social workers who are higher qualified: The situations were judged in much more differentiated way. Some are strong efficiency-orientated (1; 15). Much more situations are estimated in relation to teamwork in combination with rationality and innovation.

## Conclusions

Within the German “Qualifications Framework of Social Work” the items „personality“ and „professional skills“ are outstanding in the assessments of abilities by young social workers after leaving university. The relevance of these abilities increases in relation to the growing professional experience at the workplace. The challenges at the workplace affect obviously the estimation of the most important abilities which they had achieved at university. But the alumni underlined not only the importance of theoretical knowledge but also social and technical skills as flexibility, motivation of others, teamwork and efficacy which also increase clearly through practice experience. On the other hand the alumni underestimated the role of scientific skills as investigation and research. Within the everyday work these topics play obviously a marginal role. It seems that there is a clear gap between different sets of competencies, which are taught in university and which are assessed to be relevant in practical fields.

The bachelor program of social work should qualify the alumni not only in relation to very basic skills, but also train them to react appropriately to new and unexpected situations. As our results show higher education of social workers enable the alumni to differentiate between diverse necessities in relation to the specific situational context. Our conclusion is: Studying social work enables the alumni to widen their view in relation to different necessities. They can take in mind more aspects of competent managing different situations in different ways. So the alumni are better prepared by their skills for a very complex professional field. But the study at the university is not sufficient to overcome the challenges of practical problems. There is a clear evidence for the necessity to combine and coordinate the study curriculum with practical training in order to complete social workers professionalism.

## References

- Backhaus, K., Erichson, B., Plinke, W., & Weiber, R. (2011): *Multivariate Analysemethoden*. 13. Auflage. Heidelberg: Springer.
- Europaen Commission (2018): *Descriptors defining levels in the European Qualifications Framework (EQF)* (<https://ec.europa.eu/ploteus/en/content/descriptors-page>, 30<sup>th</sup> of may 2018)
- Moch, M. (2007). Praxis im dualen Studiengang Soziale Arbeit – Erfahrungen Studierender unter der Lupe. *Theorie und Praxis der Sozialen Arbeit*, 58, p. 69-75.
- Moch, M. (2009). Kompetenzerwerb im Praxisstudium – Handlungskonstituierende Merkmale in „lehrreichen“ Situationen. *Neue Praxis*, 39, p. 620-629.

- Moch, M. (2013). Early Professional Biographies - On the career entry and work experience of BA graduates in 'Social Work' In: *International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM 2013)* (URL: <http://dl.acm.org/citation.cfm?id=2536620>, 30<sup>th</sup> of may 2018)
- Moch, M. (2016).
- Moch, M. (2018). *Kompetentes Handeln in stationären Erziehungshilfen*. Wiesbaden: Springer.
- Moch, M., & Aparicio, P. (2016): Promoting student' s competence through counseling by a practicum-tutor. In: Santos Rego, M.; Sotelino Sosada, L. & Lorenzo Moledo, M. (Eds.) (2016): *Aprendizaje-Servicio e innovacion en la universidad*. Universidade Santiago de Compostela publications. p. 581 – 589.
- Schäfer, P., & Bartosch, U. (2016). *Qualifikationsrahmen Soziale Arbeit (QR SozArb)*. Fachbereichstag Soziale Arbeit. ([http://www.fbts.de/fileadmin/fbts/QR\\_SozArb\\_Version\\_6.0.pdf](http://www.fbts.de/fileadmin/fbts/QR_SozArb_Version_6.0.pdf) ). 16<sup>th</sup> of april 2018.
- Treptow, R. (2011). Handlungskompetenz. In Otto, H.-U. & Thiersch, H. (Hrsg.), *Handbuch Soziale Arbeit*, München: Reinhardt, p. 601-608.



# CHALLENGES AND CHALLENGES IN HIGHER EDUCATION AND SCIENTIFIC RESEARCH IN LATIN AMERICA, ARGENTINA IN SPECIAL

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**Abstract:** *This article focuses on the recent changes and advances in Higher Education in Latin American and Caribbean countries resulting from the impact that the European System of Higher Education has had in this region and provides data related to some indicators of Higher Education and Science and Technology in order to highlight visible differences among countries of this area, particularly Argentina.*

**Keywords:** *University Higher Education; Science and Technology; Latin America and the caribbean, European System.*

## 1. Introduction

Higher education innovative projects as well as scientific and technological development policies greatly impact on the socio-cultural and economic conditions of countries.

In the 90's it became necessary to implement a paradigm shift in higher education to ensure institutional quality in the universities. Within this context, new evaluation models were developed which influenced some Latin American countries.

Based on these first initiatives as well as on others, the Bologna Process emerged in Italy in 1999 setting the bases for the creation of a "European Space for Higher Education" (Malo, 2005) The main objectives of the Bologna Process were to transform the European System of Higher Education into a reference model to students and teachers from European

countries as well as from other parts of the world and to increase employment in the European Union. Further objectives were outlined during the Bologna Process, such as the mobility of students, teachers and researchers and the implementation of quality standards and common degrees (Bulgarin Olvera, 2009).

The Tuning Project was created within this changing trend to generate spaces of integration among the European countries to reach points of convergence (González, Wagenaar & Beneitone, 2004). It was accepted internationally and generated new higher education paradigms, such as student-centered teaching-learning, development of skills and competences for professional practice, academic credit systems and program quality. Still, one of the main objections to the Tuning Project was the fact that it was centered on Europe. The subsequent integration of Latin American and Caribbean countries to the European Union gave rise to the Latin American Tuning Project whose creation took place in Mexico city (2005) with the participation of 62 universities from 18 Latin American and Caribbean countries and 135 universities from 25 European countries (Beneitone, Esquetini, González, Marty Maletá, Siuti & Wagenaar, 2004-2007). The Latin American Tuning Project is an initiative from universities to foster collaboration among higher education institutions to guarantee quality, effectiveness, transparency, and recognition of qualifications between Latin America and the Caribbean and the European Union.

As of the Latin American Tuning Project onwards, homologation procedures were followed by the different higher education systems in relation to the duration of careers, the structure of cycles and system of credits in order to improve the quality of university teaching (Beneitone, Esquetini, González, Marty Maletá, Siuti & Wagenaar, 2004-2007).

Among the main obstacles that made the articulation of initiatives between Latin America and the Caribbean and the European Union so slow are the diversity of degrees awarded by Latin American and Caribbean institutions and the lack of financial resources for the development of innovative projects.

### **1.1. The Higher Education and Science and Technology in Latin America and the Caribbean**

It is nonetheless worthy of note that thanks to the Latin American Tuning Project, higher education in Latin America and the Caribbean has undergone

important and positive changes through the implementation of programs aimed at improving educational levels.

On the other hand, science and technology in Latin América and the Caribbean have witnessed a significant growth not only in the investments in Innovation and Development (I+D) in some countries of this region but also in the incorporation of researchers into scientific programs.

The source of information consulted to give support to the advances herein reported on higher education as well as on science and technology is the *Red de Indicadores de Ciencia y Tecnología Iberoamericana e Interamericana* (RICYT) [Ibero-American and Inter-American Network of Science and Technology Indicators] ([www.ricyt.org](http://www.ricyt.org)).

The increase in the number of graduate and doctoral degrees awarded in Latin América and the Caribbean is a clear evidence of the progress of higher education in this region. The highest percentage of undergraduate degrees awarded in Iberoamérica corresponds to the Social Sciences (55%) and it is followed by Engineering and Technology (16%) and the Medical Sciences (15%), the Humanistic and Natural Sciences being the fields with the lowest percentage ([www.ricyt.org](http://www.ricyt.org); Albornoz, Barrere & Sokil, 2017).

The number of Ph.D. degrees completed in Iberoamérica also show a significant growth, with similar percentages in the Natural, Exact, Social, and Humanistic Sciences (Albornoz, Barrere & Sokil, 2017). In Argentina, the largest number of Ph.D. degrees has been awarded in the field of Exact and Natural Sciences, whereas the largest number of doctorates in Brazil and Colombia has been awarded in the Humanistic Sciences. In México and Costa Rica, the highest number of Ph.D. theses awarded has been in the area of the Social Sciences.

The largest investments in Research and Development (I+D) in Latin American and Caribbean countries (Purchasing Power Parity in dollars, World Bank conversion rates) are reported to have been made in Brazil (64%), México (17%), Argentina (8%), and other countries (11%) ([www.ricyt.org](http://www.ricyt.org)). The analysis of investments in relation to the type of research performed shows that the highest investments are devoted to applied research in Argentina, Chile, Spain, and Costa Rica, followed by investments devoted to basic research in Argentina and Chile. In Spain and Costa Rica, applied research was followed by research in experimental development (Albornoz, Barrere & Sokil, 2017).

Based on the literature consulted, it becomes clear that Latin American universities have a key role in Research and Development and that the majority of researchers belong mainly to public universities (Albornoz, Barrere & Sokil, 2017). As pointed out by García Giménez (2016), excellence and the university are closely linked, excellence being defined by indicators of performance, academic compromise between students and teachers, and implementation of programs with academic freedom.

## **2. Conclusions**

In Latin American and Caribbean countries, higher education has evolved significantly in terms of the expansion of enrollments and graduate and Ph.D. degrees. Although there are some divergences in the region, permanent university teaching staffs in this region are—in the majority— composed of professors who have reached Ph.D. status. As a final remark, it can be concluded that the investment in I+D has increased particularly in some countries of Latin América and the Caribbean, and that this increase can be translated into an increment in the number of researchers, especially in public universities, particularly in Argentina in the period 2009-2015.

## **References:**

- Albornoz, M., Barrere, R., & Sokil, J. (2017). El Estado de la Ciencia: Principales indicadores de Ciencia y Tecnología Iberoamericanos Interamericanos. Las universidades lideran las I+D en América Latina.
- Bulgarin Olvera, R. (2009). Educación Superior en América Latina y el Proceso de Bolonia: Alcances y Desafíos. *Revista Mexicana de Orientación Educativa*, .6 (16), 50-58
- García Giménez E. (2016). Conceptos de Excelencia en la Educación Superior Universitaria. *Educación Médica*, 17, 83-87.
- González, J., Wagenaar, R., & Beneitone, P. (2004) TUNING -AMERICA LATINA:Un Proyecto de las Universidades. *Revista iberoamericana de educación*, 35, 152-164.
- Malo, S. (2005). Proceso de Bolonia y América Latina. *Foreign Affairs. Revista Iberoamericana*, 5, 21-33.
- Red de Indicadores de Ciencia y Tecnología Iberoamericana e Interamericana (RICYT) ([www.ricyt.org](http://www.ricyt.org)).
- Reflexiones y perspectivas de la educación superior en América Latina. Libro Tuning America Latina. Informe final (2004-2007). Editors. Beneitone P., Esquetini, C.,González, J., Marty Maletá, M., Siuti, G. & Wagenaar, R.

## **PHILOSOPHICAL REFLECTIONS UPON A FEW THEORIES AND PRACTICES IN THE EDUCATIONAL SYSTEM**

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- Review -

**Constantin Cucos, Education. Refoundations, Dynamics, Prefigurations, Iasi, Polirom Publishing House, 2017, 278p, ISBN 978-973-46-6760-4**

For several years now, professor Constantin Cucos has published papers which approach a wide array of issues pertaining to pedagogy and psycho-pedagogy, the methodology of cultural and intercultural education, educational management, the technologization of education, aesthetic and religious education or the theory and methodology of education.

Polirom Publishing House has recently published one of his books of philosophical reflections upon the terms and practices of the educational system, with reference to the means of connecting the Romanian educational system to the European and the international ones. Far from being a mere analysis of the field mentioned above, the author proposes a journey along the numerous restructuring and innovations within the educational system and examines critically the set of hindrances and challenges typical to a society based on knowledge, without omitting the formulation of certain opinions and perspectives regarding the areas where one needs to continue intervening.

From the very first chapter, Cucos develops the idea that the innovative process in education is continuous, and “the reformation of education does not solely rely on the normative framework expressed through curricular documents, procedures, methodologies and recommendations; it regards mentalities and attitudes, the actions which are less visible and which can be tested directly” (p.19). Of all the aspects approached by the author, I will focus on the following aspects: education does not only regard the present, but the perspective of a person and a community; education must begin with a general training which can then be oriented towards an authentic professionalization; any educational enterprise involves focusing on certain educational contents, as well as on the means of reaching them; apart from transmitting knowledge and values, education involves the interrogation and the applicability of what is accumulated.

The author insists upon the idea that the purpose of intellectual education is that each of its beneficiaries can become autonomous, namely to judge “with their own head the science or knowledge of others, to look for explanations, to refuse prejudices, to be inventive, critical and objective with one’s own views” (p.28).

Extensive space is devoted to the processes of change and innovations, the dynamics of education being considered a reality which ought to be assumed by all the factors involved in society. Based on this idea, I would like to focus on the problem of investing in the student, on the need to elaborate training programs which are connected to his real needs of individual and social development, to institute certain scientific criteria of evaluating the outcomes of education, the increase of responsibility in the decision-making process by involving specialists, the implementation of public policies regarding budget allocation and staff training, the promotion of educational policies meant to connect the Romanian educational system with the tendencies taking place at a European and international level.

Having arrived in this point of our discussion, professor Cucos resorts to a philosophical argumentation by which he succeeds to identify the major interrogations of the “refoundation - dynamics - prefiguration” ternary, as well as the relationship created between education and the other human practices. The major guidelines resulting from the author’s approach are structured around ontological issues (natural elements of education), praxeological issues (elements of educational procedure and practices), epistemological issues (the possibilities and limits of understanding the educational phenomenon), axiological issues (the values transmitted through the contents of education), normative issues (respecting certain ethical and judicial regulations) and dialectic issues (the temporal evolution of education).

Parts of these ideas are fathomed in the fourth and fifth chapters. Referring, for instance, to the “community, democracy, education” ternary, the author’s reflection focuses on themes of real interest, such as: the learning situation and the common construction of knowledge, the dynamics of education and its explanation, the integrative role of schools for individuals and communities, cooperative learning and individual performances, civic education and civic activism in knowledge societies, the reformation of education and the intercultural context in education. The author also distinctively focuses on the idea of “school after school” as an educational alternative with a special importance due to its permanence, its closer proximity to the cultural artlessness of the group, its correspondence to the actual interests and needs of those being educated, its ability to correct disorganized situations in schools, its contribution to the shaping of the cultural identity of people and groups. For these reasons, says the author,

“we must valorize complementary situations and formulas of education that the community generates, shares or supports at “a given time” (p.111).

In a continuation of these ideas, the authors then discusses numerous issues posed by the informatization of education and the dilemmas that this generates. After making a radiography of the new technological media in the educational context, professor Cucos pleads for an analysis of the introduction of alternative or digital manuals as a consequence of certain studies and pilot projects “in order to know the impact, the positive and negative reverberations, to correlate or correct these manuals with the realities and possibilities of the students, the schools and the teachers” (p. 128-129).

Further on, he states that, as opposed to the classical manual, the digital manual “is a totally different product, built based on new principles of explaining the learning contents, after additional didacticization of the learning contents, and crafted on a learning philosophy which can enhance activism, interactivity, progress and creativity” (p.131). However, the author does not sympathize with the tendency of totally replacing the classical manual with its digital counterpart, supporting the development of an ideology of complementarity and the progressive annexation of the new learning resources. This is essential because, according to Constantin Cucos, there are learning situations and contexts when the interaction with the manual as an object is imposed for psychological, didactic and anthropological reasons.

The main thesis that the author promotes is that the relationship between information technology and education becomes more and more dynamic: on the one hand, we witness a permanent evolution of technical supports, which imposes the formation of new abilities, conducts and attitudes, and, on the other hand, the degree of assimilation of the new technologies in relation to the demands of education is more and more alert. The author even states that “the advance of technology is (also) a consequence of the force and amplitude of education, while education also specifically subsumes these benefits” (p.134). His conclusion is that information and communication technologies produce “multiple objectual, procedural, relational and valoric changes, which compels all of those who think and produce education to take these alterations in consideration, to assume them and to correlate them with the guidelines and finalities typical to formation” (p.136).

As I have mentioned before, the book is not only a principled approach of these problems of education, but also focuses on the changes that define the learning groups, the design of educational contents and pedagogical principles, the procedures which differentiate the values which are transmitted, the reformulation of the teaching - learning - evaluation strategy

under the incidence of the new vectors or the rethinking of the relation of the school and knowledge up to a managerial, administrative and material level.

The process of training the teaching staff, an essential element of the quality of education, can also be included in the same context. From this perspective, the author presents practically applicable aspects, while the solutions that he proposes are meant to trigger “not only good intentions, but also profound reflection and the responsibility of those acting in the educational field. Here are some illustrations of the statements above: investing in human resources is a strategic factor of progress in the medium or long term; the need to impose the new training formulas in the already existing array of education; the tools of initial formation of teachers should be correlated to the perspective of continuous training; entering the training system must be conditioned by a test of aptitudes or knowledge; continuous evaluations should become sorting and crediting filters of teachers; the reevaluation of the strategies of practical training.

After having read the book, one can conclude that professor Cucos has a profound knowledge of the mechanisms which define the educational system in our country and of the way in which the political decision acts in this field. Starting from this aspect, he examines critically issues such as: the lack of consistency in the implementation of certain measures, the frequent alterations which occur in the educational system invoked by the so-called reform, the depreciation of the didactic function, poor valorization of field studies and expertise of the experts in the educational system, under-financing education, the ambiguous law which encourages bureaucracy and the elements of voluntarism in adopting certain decisions.

One could undoubtedly mention further interesting aspects of the author’s enterprise, but I will let the reader discover and analyze them from his/her own perspective. I would like to conclude by highlighting the colloquial style in which the text of the book is elaborated, the subtle way in which he correlates theoretical issues with practically applicable ones, as well as the numerous examples that he employs in order to facilitate the understanding of the wealth of ideas and opinions which we encounter as we read the book. All of these are, to my view, sufficient reasons to recommend this book not only to those training for a didactic career in the educational system, but also to the specialists or the people with the power to make decisions in this field.