

# ENPAIR

European Network  
on Psychoeducational Assessment,  
Intervention and Rehabilitation



## ENPAIR

### From Assessment to Rehabilitation

## Second Network Meeting and Conference

**GRANADA, May 9th-10th, 2019**

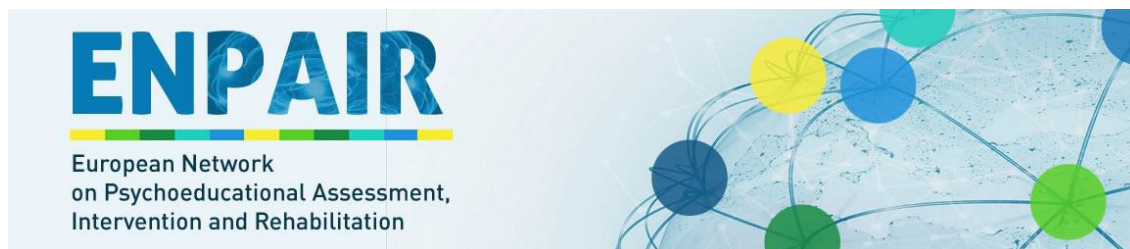
CENTRO DE INVESTIGACIÓN "MENTE, CEREBRO Y COMPORTAMIENTO"

CIMCYC – University of Granada

## PROGRAMME



**Organizers** Sara Mata & Francisca Serrano (Universidad de Granada); Wilma Resing, Karl Wiedl, Marco Hessels, & Dimitri Zbainos, (ENPAIR)



## Programme II ENPAIR Conference

Thursday, May 9 <sup>th</sup> – Lab 14 (Floor 2), CIMCYC-UGR, Granada	
17.00-17.30	Registration
17.30-18.30	Welcome meeting
18.30-20.00	Cocktail& Networking

## Programme II ENPAIR Conference

<b>Friday, May 10<sup>th</sup></b> – Conference room 1, CIMCYC-UGR	
9.00- 9.25	Official start ENPAIR/ Opening
9.25-10.10	<p>Key speaker #1 - <b>Elena Navarro</b>(University of Granada, CIMCYC)</p> <p><i>Aging in the 21st century: Challenges and proposals from Psychology.</i></p>
10.10-10.55	<p>Key speaker #2 - <b>Harriet Simpson</b> Newcastle University, United Kingdom.</p> <p><i>Integrating Speech and Language Therapy into Primary Schools - A Practical Approach.</i></p>



## Programme II ENPAIR Conference

Friday, May 10 <sup>th</sup> – Conference room 1, CIMCYC-UGR	
11.00-11.30	Coffee/tea break- Posters with presenters
11.35-12.20	<p>Oral Presentations 1-3</p> <ol style="list-style-type: none"> <li>1) Sara Mata &amp; Francisca Serrano -<i>Usefulness of the evaluation of learning potential in spelling tasks in adolescents with intellectual disability.</i></li> <li>2) Marlen Marzini, Torsten Krämer, Meike Engelhardt, Teresa Sansour, Peter Zentel - <i>Global Atlas of People with Profound and Multiple Disabilities</i></li> <li>3) Sophie Wenzel - <i>Genetic basis of verbal learning potential as measured by the Verbal Learning and Memory Test (VLMT) in patients diagnosed with schizophrenia</i></li> </ol>
12.30-13.30	<p>Oral Presentations 4-6</p> <ol style="list-style-type: none"> <li>4) Lex Borghans, Seethu Christopher, Karien Coppens, Petra Hurks, Rico Möckel &amp; Corrie Urlings - <i>Executive functioning of kindergartners; what can sensors in toys reveal?</i></li> <li>5) Iveta Kovalcikova - <i>Word-Sentence-Paragraph-Text (WoSePaT). Domain-specific stimulation of Executive Function Processes - potential of Language (L1) curriculum.</i></li> <li>6) Marco G.P. Hessels, Maria Beza &amp; Carmen A.L. Zurbriggen - <i>Students' emotional inclusion, social inclusion, and academic self-concept: A psychometric analysis of the French version of the Perception of Inclusion Questionnaire</i></li> </ol>



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## Programme II ENPAIR Conference

Friday, May 10 <sup>th</sup> – Conference room 1, CIMCYC-UGR	
13.30-15.30	Lunch time-coffee-poster session
15.30 - 16.15	<p>Key speaker #3 - <b>Bart Vogelaar</b></p> <p>Leiden University, Netherlands.</p> <p><i>Dynamic testing of gifted children: the influence of executive functions.</i></p>
16.15-16-45	<p>Oral Presentations 7-8</p> <p>7) Dóra Fanni Szabó - <i>The applicability of the short version of the WHO Well-being questionnaire among resilient and non-resilient students</i></p> <p>8) Francisca Serrano &amp; Sara Mata - <i>Learning potential added to Galexia: An evidence-based App for intervention in reading</i></p>
16.45-17.30	General Discussion and Closing

## Summaries – Key note speakers

### Key note #1 - 9.25-10.10

**Elena Navarro-González**

University of Granada, CIMCYC

#### **Aging in the 21st Century: Challenges and proposals from Psychology**

Advances in Western societies have led to a very significant increase in life expectancy. Due to this situation, aging is a key characteristic of European societies which implies a great challenge for nowadays society. Psychologist - among others authorities - must be prepared to face and serve the needs of this growing population. For the better understanding of this condition and future perspectives of the aging community in Europe, it is necessary to know their epidemiological and socio-psycho-sanitary conditions as is needed to understand aging as a phase of life where learning and improving is still possible. In this sense, the concept of successful aging and the ways to encourage it should be a priority for psychology and other disciplines.

### Key note #2 - 10.10-10.55

**Harriet Simpson**

Newcastle University, United Kingdom.

#### **Integrating Speech and Language Therapy into Primary Schools - A Practical Approach.**

This presentation focuses on the clinical application of research findings supporting the introduction of vocabulary pre-teaching (St. John and Pickup, 2015) in several mainstream primary schools in the UK, to support the children's ability to access the school curriculum. The use of pre-teaching vocabulary has been combined with the use of Colourful Semantics resources (Alison Bryan, 1997) to support comprehension and retention of classroom language. This presentation also discusses the importance of regular intervention, delivered by a Specialist Speech and Language Therapist and/or school staff, including teachers and teaching assistants. The involvement of school staff in delivering regular intervention across the child's daily curriculum activities is a key factor in the success of this practical clinical intervention. Practical strategies, examples of intervention and staff training programmes will be discussed in this presentation. Examples of therapy resources and adaptations of existing language teaching materials

will be presented, to demonstrate the impact of this simple yet highly effective clinical approach.

### **Key note #3 - 15.30 - 16.15**

**Bart Vogelaar**

Leiden University, Netherlands.

#### **Dynamic testing of gifted children: the influence of executive functions.**

Dynamic tests have been shown to provide a valid estimate of the potential for learning of children who are often seen as underperforming on traditional tests, such as those from low SES backgrounds, with diverse cultural backgrounds or those with low cognitive capacities. Many dynamic tests have been developed to assess the cognitive capacities of children who were at the lower end of the intelligence range. Dynamic testing of children at the higher end of the intelligence range, those who are considered gifted, however, has received little attention in the literature. In practice, it was often believed that these children manage their learning on their own, and do not need a dynamic approach to show their cognitive capacities. In this key note presentation, it will, however, be argued that gifted children's learning, just like that of other children, takes place within a zone of proximal development. The application of dynamic testing for gifted children will be examined, focusing on the usefulness of this type of testing in unveiling information about these children's progression in learning and need for instruction. Moreover, the role that executive functions play in these children's learning will be examined.



## Summaries – Oral presentations

### Oral Presentations 1-3 - 11:30-11:50

#### Presentation 1:

**Sara Mata & Francisca Serrano**

University of Granada (Spain)

**Usefulness of the evaluation of learning potential in spelling tasks in adolescents with intellectual disability.**

Intellectual disability (ID) implies a series of limitations in the skills that the person learns to function in their daily life and that allow them to respond to different situations and places, affecting in such a way, inevitably in school. In Spain, there are almost 300,000 people with ID. One of the challenges in these people is the correct acquisition and use of language, where they usually present problems in all areas: phonology, morphology, syntax, reading, writing and pragmatics. Many of them fail to develop the most advanced skills (reading and writing) despite being immersed in therapeutic contexts. This work focuses on analyzing the usefulness of two learning potential assessment tasks in spelling in subjects with ID. A total of 16 adolescents participated ( $M_{Age} = 18.25$ ,  $SD = 1.96$ ), 9 boys and 7 girls. The tests administered were the Raven intelligence test to confirm the ID and two learning potential assessment tasks in speech discrimination of homophones and dictation of words (regulated orthography) (both applied in a pretest-training-posttest format). The results show that after the mediation the participants show significant improvements in speech discrimination of homophones but not in regulated orthography. The implications of the results will be discussed in the conference and their relationship with traditional instruction and memory.

## **Presentation 2:**

**MarlenMarzini, TorstenKrämer, MeikeEngelhardt, Teresa Sansour, Peter Zentel**

Heidelberg University of Education

### **Global Atlas of People with Profound and Multiple Disabilities**

People with profound intellectual and multiple disabilities (PIMD) often communicate on a pre-symbolic level and mostly use unconventional behaviour signals (e.g., body movements, vocalizations) to express their needs. The number of interaction partners who are capable of accurately interpreting these highly individual behaviour signals is limited mostly. This significantly restricts their participation in all areas of life.

INSENSION is a European project focusing on better understanding of the behaviour signals by using the advances of unobtrusive technological recognition tools. Facilitating the communication of and towards people with PIMD could contribute to improve their participation and quality of life. The group of persons with PIMD is relatively small but very heterogeneous with a prevalence of approximately 1-2% of people with intellectual disabilities. Hence, there is significantly less research in the field of diagnostic in comparison to the context of milder forms of intellectual disabilities. Unfortunately, this leads to a lack of adequately sensitive and standardized as well as empirically based assessment tools for people with PIMD. To interpret these various behaviour signals accurately against the background of the particular context, a comprehensive assessment tool has been developed. The questionnaire is based on renowned assessment tools and collects information on preverbal communication, challenging behaviour, mood, pain, (dis)pleasure and general data of the test persons. This diagnostic tool will be integrated into the so-called Global Atlas - a global database targeting people with PIMD. It provides a web-based user interface to a repository, which contains a comprehensive collection of information on the target group in question. Accordingly, it can be used for the diagnostic process in practice and science. In addition, the Global Atlas provides intraindividual and interindividual analysis options as well as the subsequent use of the database for own studies.

The presentation will introduce the Global Atlas with an additional discussion of ways of using. This research is supported by the EU's Horizon 2020 program (grant agreement 780819).

### **Presentation 3:**

**Sophie Wenzel**

University of Halle-Wittenberg, Germany

#### **Genetic basis of verbal learning potential as measured by the Verbal Learning and Memory Test (VLMT) in patients diagnosed with schizophrenia**

Aim of the study: Verbal learning and memory is an often and severely impaired cognition in schizophrenia patients. Affected patients show reduced ability to encode new verbal material for later recall. The basis of this deficit can be due to reduced working memory processes or reduced ability of transmit information to the secondary memory. The Verbal Learning and Memory Test (VLMT) is a dynamic testing tool and opens the possibility to classify the varying degrees of verbal learning potential in patients. While there already are studies underlining the genetic basis of secondary verbal memory (SVM), this is not the case for the paradigm of a differentiated view of the learning course through dynamic testing. We raised the question if certain gene loci/genotypes that were found to correspond to deficits in SVM in schizophrenic patients also are able to differentiate between persons with different learning courses as assessed by the VLMT. Test subjects and methods: The sample included  $n=362$  patients diagnosed with schizophrenia. These performed the VLMT and subsequently were classified according to their test performances. For the present candidate gene-based group comparison study in cross-sectional research design, 108 gene markers identified as risk gene variation for schizophrenia by the Schizophrenia Working Group of the Psychiatric Genomics Consortium (PGC) served as genotypic reference. As phenotypical trait, verbal learning (compromised vs. non-compromised working memory and intact learning potential vs. compromised working memory and compromised learning potential) was operationalized. Key findings: Post-hoc conducted individual comparisons (Bonferroni correction) showed that test subjects differed significantly ( $p<0,001$ ) in their VLMT-performances and



thus could be classified according to three previously postulated learner groups. Using a logistic regression model, genetic differences between learner groups could be determined for genetic differentiability. Conclusion: The results of the present candidate gene study support the assumption of a genetic basis for a paradigm of a differentiated view of cognitive learning performance through dynamic testing.

## Oral Presentations 4-6 - 12:30-13:30

### Presentation 4:

#### Authors and affiliations, in alphabetical order:

Prof.dr. Borghans, Lex	Maastricht University – School of Business and Economics lex.borghans@maastrichtuniversity.nl
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### Executive functioning of kindergartners; what can sensors in toys reveal?

Executive functions are cognitive functions that are related to important life outcomes, such as school success (Borella, Carretti, & Pelegrina, 2010) and school readiness (Blair & Razza, 2007). It is therefore important to gain insight into cognitive functioning of young children in a broad sense. Researchers have developed tasks that resemble play situations, to be able to test young children (Carlson, 2005). Technology however offers all kinds of opportunities to use sensors to collect data. In this study, we integrate sensors into toys to gain insight into the executive functioning skills of young children. Executive functions exist out of different components, namely working memory, inhibition and cognitive flexibility (Diamond,



2013). Originally, executive functioning tasks were developed to establish brain damage. However, our study fits with the idea that testing is meant to study the resemblance between everyday functioning and the functioning during the task (so-called 'verisimilitude' approach as described by Franzen and Wilhelm (1996)), with a focus on a subgroup that is more difficult to test, such as young children (Beck, Schaefer, Pang, & Carlson, 2011). The central question of this study is whether it is possible to gain insight into executive functioning by using sensors in toys. We look at the relationship between the data retrieved from the sensor toy and the executive functioning tasks, both per task and when including all tasks. The toy is a wooden maze in which sensors were integrated. Playing with the maze provides information on the way kindergartners with an average age of 6 years old solve mazes ('play features'). Via structural equation modeling techniques the collected data is compared to the Tower of London, Five Point test, Raven Coloured Progressive Matrices, Mazes, 1 minute animal naming, Digitspan Forward and a Go/No-go task. All tasks within this test battery are related to domains of executive functioning. The results will show the relations between the measured 'play features' and executive functioning tests. We also gain insight into how the maze can be used to make predictions about executive functioning of children. This is divided into a prediction per task, as well as the performance of children across tasks. The results contribute to how sensors can be used to collect data about children's cognitive abilities as compared to traditional tests. This provides insight into how modern technology, which is omnipresent nowadays, can be used in measurements in young children.



## **Presentation 5:**

**IvetaKovalcikova**

University of Presov, Slovak Republic

### **Word-Sentence-Paragraph-Text(WoSePaT). Domain-specific stimulation of Executive Function Processes - potential of Language (L1) curriculum.**

A domain-specific program (EXEFUN-SLOV) aimed at stimulation of executive functioning of underperforming pupils was developed and subsequently experimentally verified. The program is of a blended nature. Slovak language (L1) curriculum was serving as a domain-specific basis. The Program included metacognitive stimulation using SMARTS metacognitive curriculum and it was built on a peer mediation principles. The sample consisted of 120 pupils, 40 in the experimental group and 40 in the control group 1, and 40 in the control group 2. Subjects were sampled from the low performing pupils of regular elementary schools. The major goal of the study was to develop evidence-based information about how executive functioning in low performing children can be improved through a domain specific intervention program. The research design followed a pre-test/post-test, experimental vs. control group format. The experimental intervention lasted for a period of 3 months with a 60-minute stimulation unit twice a week. Administrators of the intervention programme were the students of Education/Special Education master's degree programme who were trained under the supervision of a research team members. Quantitative data included measures of children's pre- and post-test performance in attention control, cognitive flexibility, verbal fluency, design fluency, inhibition, cognitive planning and language skills. The results of the experiment will be presented and discussed.

*Note:* This study has been financially supported by APVV (Slovak Research Agency of Ministry of Education, under the contract APVV-15-0273).



## Presentation 6:

**Marco G.P. Hessels<sup>1,2</sup>, Maria Beza<sup>1</sup> & Carmen A.L. Zurbriggen<sup>3</sup>**

<sup>1</sup>University of Geneva, Switzerland

<sup>2</sup>North-West University, Vanderbijlpark, South-Africa

<sup>3</sup>University of Bielefeld, Germany

### **Students' emotional inclusion, social inclusion, and academic self-concept: A psychometric analysis of the French version of the Perception of Inclusion Questionnaire (PIQ)**

The Perceptions of Inclusion Questionnaire (PIQ) is a very reliable short questionnaire that measures three dimensions of inclusion of students in 3rd to 8th Grade (8- to 16-year-olds): emotional inclusion, social inclusion and academic self-concept. The PIQ exist in three versions, each composed of 12 items (four items per subscales), one for students, one for parents and one for teachers. The instrument has been translated into more than 20 languages (see [www.piqinfo.ch](http://www.piqinfo.ch)). For the first time, data was collected in French speaking Switzerland. The test was administered to 102 primary school children, their parents and their teachers. The analyses first of all show that the French version of the PIQ is a reliable instrument. It also shows that the majority of the children feels well included, both socially and emotionally, but a certain number of children is not. The analyses further show that young children feel better included than older children and that the self-concept of boys is more positive than that of girls. This concerns the children's evaluations, but also those of their parents and teachers.

## **Oral Presentations 7-8 - 16:15-16:45**

### **Presentation 7:**

**DóraFanniSzabó**

MTA-SZTE Research Group on the Development of Competencies, Hungary

#### **The applicability of the short version of the WHO Well-being questionnaire among resilient and non-resilient students**

Research on resilience has increased considerably over the last decades. The investigations are often focused on children with low socio-economic status who exhibit high level of performance. Despite the growing interest, there is no consensus on the conceptualization and the operationalization of the phenomenon. Significant differences can be discovered in the components of the definition and the assessment methods of the two fundamental judgement (risk and good developmental outcome). It is necessary to explore valid procedures and instruments in order to standardize the results. Questions in our current research were aimed at the possibility to use a scale that is appropriate to measure the emotional dimension of good developmental outcome. The purpose of this paper is to present the statistical characteristics of the Hungarian version (Rózsa et al, 2003; Susanszky et al, 2006) of the WHO General Well-Being Index (Bech, 1996) among children, in the context of identifying resilient students. The five-item version of the scale (WBI-5) is one of the most commonly used instrument, applied at the measurement of psychological well-being. Based on previous findings we hypothesized, that (1) the scale can work reliably among 4th and 6th grade students, and (2) the exploratory and (3) the confirmatory factor analysis will also confirm the initial structure of the instrument. The participants were 1233 students, who were divided almost equally among the investigated age groups. During the examination of the internal consistency of the WBI-5, the Cronbach- $\alpha$  value was found to be higher in the case of 4th graders' subsample (0.69), than in the other age group's (0.68), and in the entire sample (0.68). The reliability of the scale is similar in the case of subsamples that were established based on disadvantaged background (4th=0.71; 6th=0.69). We

examined the corrected item-total correlations, which have proved to be appropriate for each item. The correlations were between 0.34 and 0.51. The unrotated principal component analysis of the WBI-5 confirmed the homogeneity (Kaiser-Meyer-Olkin-index=0.761; Bartlett's  $p < 0.001$ ). Based on the CFA, the factor structure showed an acceptable fit ( $\chi^2/df=3.354$ ; CFI=0.983; TLI=0.965; RMSEA=0.047).

Overall, it can be concluded that the reliability of the WBI-5 was lower than expected, although the confirmation of the initial structure provides reason for further investigations. The extension of sampling and involvement of other scales may contribute to verify the validity of an instrument that is appropriate to measure students' psychological well-being, and provides a quick and simple feedback in everyday school practice.

## **Presentation 8:**

**Francisca Serrano & Sara Mata**

University of Granada

### **Learning potential added to Galexia: An evidence-based App for intervention in reading**

Galexia is an evidence-based software for intervention in reading fluency and comprehension, available for free as an App for Education in Google Play Store. The development and the empirical validation of the intervention program behind this App will be presented, together with some experiences of successful intervention in children of different school levels. Galexia App was implemented for supporting an intervention program which combines both repeated and accelerated reading methods in an intensive, structured and sequential training at syllable, word and text reading levels. It has shown effectiveness improving fluency skills in people with reading difficulties at different ages (children to adults). It has also shown improvements in reading comprehension. This talk will also present the idea of designing a mediational guide that can be added to Galexia in order to enhance its results and the possibility of studying learning potential in reading skills.



## Summaries – Posters

### Poster 1:

**M. Mar Gómez-Pérez<sup>1,2</sup>, Sara Mata<sup>2</sup>, Francisca Serrano<sup>2</sup> & M. Dolores Calero<sup>2</sup>.**

1. Centro de Investigación Mente, Cerebro y Comportamiento (CIMCYC), Facultad de Psicología, Universidad de Granada
2. Departamento de Psicología, Área de Psicología Evolutiva y de la Educación, Universidad de Jaén

### **Learning potential in Autism Spectrum Disorder Children: relationship with other measures**

Usefulness of the Wisconsin Card Sorting Test-Learning Potential (WCST-LP) test to assess learning potential in children with ASD have been tested. In addition, among neuropsychological tests for assessing executive functions, the Wisconsin Card Sorting Test (WCST) is one of the most used with people with Autism Spectrum Disorder (ASD). This study analyzes (1) the learning potential in a group of ASD Andalusian children through the WCST-LP; and (2) the relationship among performance in the WCST-LP test and intelligence (IQ), executive function (switching) and interpersonal abilities. Participants were 43 Andalusian children with ASD assessed with WCST-LP, WISC-IV, Stroop Test, Ekman 60 faces test and Assessment of Interpersonal Conflict Solving (ESCI). Results showed learning potential in children with ASD assessed WCST-LP test, since most of children with ASD achieved significant gains. Moreover, the test shows a significant relationship with executive function and social competence measures. In addition, some differences between gainers and non-gainers children are showed in intelligence, executive functions and interpersonal abilities. Conclusions indicate the pertinence of including the WCST-LP in ASD prognosis assessment protocols. Moreover, the study points out the need for considering IQ in the evaluation of children with ASD, given the relationship with the ASD symptoms' severity, and the correlation between measures.



## **Poster 2:**

**Dimitrios Zbainos & Dimitrios Karatzanos**

Harokopio University, Athens, Greece

### **Young adolescents' perfectionism and its relationship with academic performance and creative thinking**

Perfectionism has been defined as excessively high standards or expectations for one's own performance. Perfectionism may lead to adaptive or maladaptive behaviours. Adaptive perfectionism has been shown to be positively linked to academic performance, while maladaptive negatively. The few studies concerned with the relationship between creativity and adaptive and maladaptive perfectionism have shown similar findings.

The purpose of the present study was to investigate the relationships between perfectionism, creativity and academic performance among Greek young adolescents attending a traditional educational system. The sample included 282 students with average age of 13.7 years. They completed a Greek version of the Almost Perfect Scale-Revised (APS-R), which includes three subscales: a) the Standards subscale which measures perfectionistic endeavour by examining his/her high expectations and reflects adaptive perfectionism, b) the Discrepancy subscale which measures individuals' tendency to perceive a disparity between their standards and performance and reflects maladaptive perfectionism, and c) and the Order subscale which measures a preference for neatness and order and is used only for categorising students as perfectionists or not. Creativity was assessed by the non-verbal tasks of Torrance Test of Creative Thinking (TTCT), which measures creative thinking skills, such as originality, fluency, flexibility and elaboration. Students' school grades in Modern Greek and Mathematics were used as an indication of their academic performance.

The results firstly showed that 53.9% of the students described themselves as maladaptive perfectionists, 41.8% as adaptive and only 4.3% as non-perfectionists. They also indicated mostly non-significant correlations between creativity subscales and school grades. Furthermore, non-significant correlations were found between



creativity subscales and perfectionistic behaviours. However, adaptive perfectionism appeared to be positively and significantly correlated with both Mathematics and Greek, while maladaptive perfectionism negatively. Adaptive perfectionism appeared to positively predict performance in both subjects, while the discrepancy, negatively. As far as individual differences are concerned, girls appeared to score higher than boys in Modern Greek, in most creativity measures as well as in maladaptive perfectionism. Finally, students were divided into three groups according to their APS-R scores: adaptive perfectionists, maladaptive perfectionists and non-perfectionists. Students with adaptive perfectionism showed significantly higher performance than maladaptive and non-perfectionists in Modern Greek, while in Mathematics they performed better only than maladaptive. They also scored higher than the maladaptive ones in the elaboration subscale of TTCT which includes school-like activities.

Overall the results demonstrated that adaptive perfectionism has a positive effect in academic performance of young adolescents, yet not in creativity. This is an indication that adaptive perfectionists direct their efforts mainly to goals that are valued by the school culture. It seems that much more is needed for the development of creativity in traditional education systems for students with different characteristics.

## **Poster 3:**

**Sophie Brandon<sup>1</sup> & Marco G.P. Hessels<sup>1,2</sup>**

<sup>1</sup>University of Geneva, Switzerland, <sup>2</sup>North-West University, Vanderbijlpark, South Africa

### **Fostering reading comprehension in adults with intellectual disability by mean of a metacognitive intervention**

This study aimed at fostering functional reading in adults with moderate intellectual disability (ID). We focused on developing strategies, cognitive and metacognitive processes in persons with ID to improve text comprehension and to access functional reading. Four adults with ID from institutions in Switzerland and France participated in the 30 to 35 intervention sessions of 50 minutes each. The tasks included short texts with direct questions and logical inferences. We used explicit teaching and metacognitive questioning to improve metacognitive knowledge, flexible use of strategies as well as the development of self-determination and autonomy. The participants were encouraged to ask questions about their activities, to contextualize information, to make choices, to verbalize and to discuss the strategies used. Furthermore, they elaborated a memory aid with strategies they perceived as useful, to assist them during the reading comprehension tasks. All sessions were video recorded. The videos were transcribed verbatim to analyse teaching (type and content), the frequency and adequacy of strategies used by the participants (including the memory aid), their meta-knowledge (of oneself, tasks and strategies) and some behaviours related to task involvement. Use of external memory strategies and reading comprehension were evaluated by analysing written productions of the participants in pre- and post-tests. The preliminary results indicate that the teaching practices and the memory aid allow the participants to progress in reading comprehension and to have a better understanding of their competences and difficulties in this domain.

## **Poster 4:**

**Rachel Sermier Dessemontet<sup>1</sup>, Catherine Martinet<sup>1</sup>, & Britt-Marie Martini-Willemin<sup>2</sup>**

<sup>1</sup>Lausanne University of Teacher Education (HEP-Vaud), Switzerland

<sup>2</sup>FPSE, University of Geneva, Switzerland

### **Teaching literacy to pupils living with an intellectual disability: how to be responsive to the challenges faced by teachers**

Recently, it has been recognized that access to literacy competences is very important for persons with an intellectual disability (ID). Indeed, social participation rights are at the core of successfully constructing a more inclusive society. Literacy skills are a crucial factor in this, as they give real opportunities to make social contributions to our society. However, learning and mastering such complex competences as reading, spelling and writing are particularly difficult for persons with an ID. It is also very challenging for teachers who try to teach literacy skills to their students.

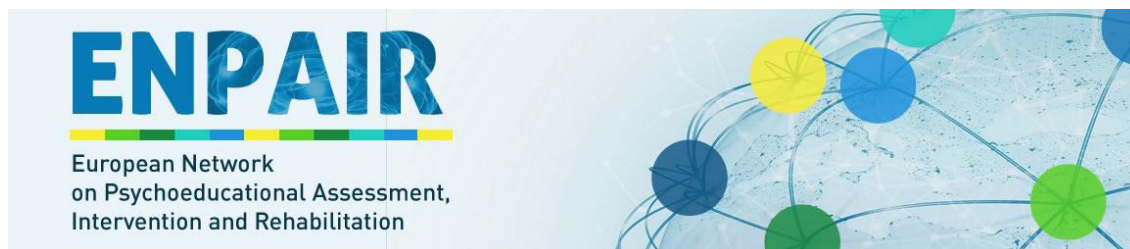
In this poster, we will present a study that is currently being executed in the French speaking part of Switzerland, with some of its preliminary findings. The study is financed by the Swiss national research foundation (FNS/SNF) and comprises a qualitative study followed by an experimental study.

The qualitative study is aimed at gathering knowledge about the literacy instruction practices of special education teachers working in self-contained classrooms for students with ID and these teachers' needs to optimize their efficiency in teaching reading to their students. Teachers in self-contained classes for 6- to 12-year old students with ID, in four different French-speaking regions of Switzerland, were asked to participate in the study. Teachers and students of 24 classes participated in the study. Three methods of data collection were implemented between October and December 2017: 1) Systematic observations of reading lessons using an adapted version of the Early Language and Literacy Classroom Observation (Smith, Brady, & Clark-Chiarelli, 2008); 2) Focus group interviews with the teachers; 3) Content-analysis of student's individualized Education Plans. Analyses are currently underway,

but the preliminary findings highlight the multiple challenges special education teachers have to face, as well as the levers of action to help them optimize their teaching practices.

The experimental study with pre-test-post-test-control-group design is aimed at assessing the effectiveness of a new reading instruction program regarding the literacy skills of students with ID. This reading instruction program was created on the basis of the findings of a meta-analysis that we conducted on the effects of phonics instruction for students with ID (SermierDesseumontet, Martinet, de Chambrier, Martini-Willemin, &Audrin, 2019) and also responds to the teachers' needs, as identified in the qualitative study. A total of 51 students with ID are currently participating in this study. Classes were randomly assigned, either to an experimental group implementing our reading instruction program or to a control group. The pre-test took place in September 2018. The post-test will take place in May 2019. The planned analyses will show if our program allowed students in the experimental group to progress more than the students in the control group that were presented the usual reading instruction. This is a particularly important issue, as to date there is no published reading instruction program available for French speaking students with ID involving research-based approaches and strategies. The benefits of such a systematic phonics program for students with ID, if proven effective, could be very important in terms of self-esteem and social participation. The effects of the implementation of this new program in self-contained classrooms will also be measured in terms of modifications in professional practices.





## Poster 5:

**Iveta Kovalčíková, Ivana Runčáková**

University of Presov, Slovakia

### **Domain-specific intervention – impact on academic performance**

Academic success is dependent on students' mastery of executive function processes, in particular, their ability to set goals, organize, prioritize, shift flexibly, access information from working memory, and self-monitor. Poster will address the importance of executive function processes in a text comprehension. Focus will be directed to experimental verification of domain-specific intervention program. Clinical findings of experimental research will be displayed. The principles and methods of intervention will be analysed.

Note: Note: This study has been financially supported by ISPA (Proposals to the International School Psychology Research Initiative) and APVV (Slovak Research Agency of Ministry of Education, under the contract APVV-15-0273).



## Poster 6:

**Torsten Krämer**

Pädagogische Hochschule Heidelberg, Germany

### **Expression of Emotions of People with Profound Intellectual and Multiple Disabilities (PIMD). A Single-Case Study.**

**Introduction.** Due to the challenging task of analyzing the expression of emotions of people with PIMD, studies in this field are underrepresented so far. Since obtaining self-reports on emotions within this group is limited and their highly individual behavior signals are often hard to read, the monitoring of physiological parameters in combination with behavior observation can provide a deeper insight into emotional dimensions, i.e. valence and arousal according to the Circumplex Model (Russell & Barrett 1999).

**Methods.** Within a mixed methods single case research approach, the expressions of three different emotional states of five participants with PIMD will be recorded during several emotion-triggering situations. The data collection includes a video-based observation with additional measurement of heartrate, skin conductance, skin temperature and movement.

**Results.** A preliminary study with one participant with PIMD has already been conducted to prove the methodological approach. First results confirmed by direct support persons (DSPs) will be presented.

**Implications.** The results broaden the understanding of emotional expression of people with PIMD and provide implications for pedagogical scenarios. By identifying the emotional response in concrete situations, the self-determination of people with PIMD will be strengthened in terms of rating a specific activity. This perceived self-efficacy may also have positive effects on emotional well-being.



## Poster 7:

**Juraj Kresila, Alena Prídavková**

University of Presov, Slovakia

### **What is the potential of mathematics in stimulating executive functioning of a weak-learner?**

The poster presents results of a research into executive functioning of a weak pupil. The overall objective of the research was to develop and experimentally verify a mathematical programme for stimulating the selected range of executive functions in a low performing pupil. The subsequent task was to determine the impact that such domain-specific intervention programme might have on a weak learner in the areas of his/her (1) executive functioning and (2) mathematical ability. The (EXEFUN-MATH) programme is designed to be used for pair stimulation. It contains both mathematical tasks and metacognitive instructions. To develop the programme's modules, it was first necessary to analyse curriculum of mathematics. The tasks are graded into difficulty levels following the criteria of cognitive processes involved in solving (e.g., memory, comprehension, application of a rule) and type of concept representation (e.g., specific, symbolic, abstract). The tasks correspond with the achievement standard and ability characteristics of the pupils participating in the research. The programme was experimentally verified on a sample of 120 pupils; 40 in the experimental group, 40 in the control group 1, and 40 in the control group 2. The participating subjects were sampled from the junior school aged underperforming pupils attending public schools whose socio-economic background was marked by signs of poverty and whose native language was not Slovak. This study was structured as a pre-post-test experimental vs. control-group design. Test measures were taken before and after the intervention in order to detect changes in children's cognitive and executive function processes. Quantitative data included measures of pupils' pre- and post-test performance in attentional control, cognitive flexibility, inhibition, and in mathematical skills. The analysis of the data has shown a significant difference in the pre-test and post-test performance in executive functioning of the pupils in all three groups. However, a significant difference in the level of mathematical abilities was recorded only in the experimental group, which is attributed to the domain-specific metacognitive intervention.

Note: This study has been financially supported by APVV (Slovak Research Agency of Ministry of Education, under the contract APVV-15-0273).

## **Poster 8:**

**Sanjuán Gómez, Miriam; Calero, María Dolores & Navarro González, Elena.**

University of Granada, Spain.

### **Cognitive and functional maintenance of elderly people through the training of informal caregivers.**

Currently it is observed that the percentage of elderly people is increasing (Pujol and Abellán, 2016). In the area of elderly people, about 28% of them need care and 80% of this care is provided by informal caregivers from their family environment (WHO, 2013). Since family support is the main source of care for dependent people in Spain (OECD, 2011) and as it is known that caregivers have a determining influence on the evolution of the elderly (Calero-García, 2011) the aim of this research was to improve the cognitive and functional status of the elderly people, by implementing a training program in their caregivers. The sample consisted on 18 elderly people from the province of Granada and their caregivers, assessed with the MEC, Clifton, Barthel, EuroQol, RMBPC. These caregivers received a training course in communication strategies and a cognitive stimulation program based on the procedure explained in the CUIDA-2 program (Calero et al., 2017). After the training phase, the caregivers implemented their acquired knowledge with the elderly person under their care during a period of three months. The final results showed a significant increase in post-treatment scores for the elderly people in the following tests: the MEC, the Clifton and the EuroQol. On the basis of the results, it has been shown that a caregiver training program produces cognitive and functional benefits in the elderly.

## **Poster 9:**

**Nora Nuber, Marco G.P. Hessels & Christine Hessels-Schlatter**

University of Geneva

### **Promotion of regular physical activity for people with intellectual disabilities in an inclusive context.**

It is well known that physical activity improves physical and mental health, increases life expectancy and allows better aging (World Health Organisation [WHO], 2010). However, we already observe high level of sedentarity in the general population and this is even more true in more fragile groups such as older adults (WHO, 2003) or people living with a disability (Temple, Frey, & Stanish, 2006). The aim of our study is to promote a regular physical activity for persons with intellectual disabilities. During our intervention program, we try to provide the participants with tools to be able to practice sport autonomously, so they can continue to practice sports after having participated in our program. At the same time, a real inclusion of people with intellectual disabilities in society is very important to us. Therefore, in Geneva, we propose sport lessons simultaneously to people with and without intellectual disabilities. Moreover, it allows us to act in agreement with current international inclusive laws (Convention on the Rights of Persons with Disabilities [CRPD], 2006). Our research has started in April 2019 with ten participants, five of whom present intellectual disabilities. In the first part (April-May), we propose theoretical lessons about physical activity, nutrition and health. Then, a professional teacher of adapted physical activity will dispense sport lessons (June-October). The content will, of course, be adapted to the participants' wishes and capacities. We hypothesize that our program will lead to long term improvement in several variables, such as physical activity level, physical fitness and mental wellbeing.



## **Poster 10:**

**Ilektra Maragkaki<sup>1</sup> & Marco G.P. Hessels<sup>1,2</sup>**

<sup>1</sup> University of Geneva, <sup>2</sup> North-West University, Vanderbijlpark, South Africa

### **Dynamic Assessment of receptive vocabulary and phonology of preschool children with German as an additional language**

Following a successful pilot adaptation of the vocabulary subtest of the Dynamic Assessment of Preschoolers' Proficiency in Learning English (DAPPLE) in German (Maragkaki & Hessels, 2017), this larger-scale research project aims to further validate and provide the basis for a dynamic screening of bilingual's children ability to learn German. In addition to vocabulary, children's phonological/articulation abilities are considered. 29 typically developing and 17 language- / or speech-impaired bilingual preschoolers were assessed through static and dynamic tests of vocabulary and phonology. Their results on both tests are compared with their performance on other assessment instruments, such as a nonword repetition test, a German language assessment for second language learners (Linguistische Sprachstandserhebung für Kinder mit Deutsch als Zweitsprache) and the ALDEQ-questionnaire, all of which are valid instruments for children with German as an additional language. Also, the non-verbal reasoning is measured with a standard intelligence test and a dynamic measure of reasoning. It is hypothesized that children's dynamic scores will more accurately differentiate the two groups and will have a stronger relationship with the aforementioned alternative, valid, assessment tasks than their "static" scores.



## The Venue

The Mind, Brain and Behavior Research Center (**CIMCYC – Centro de investigación Mente, Cerebro y Comportamiento**) of the University of Granada (UGR) is a center dedicated to psychological research of excellence. The Center incorporates scientists who work in all areas of Psychology and who are motivated by the study of behavior, mind and brain. They use a set of classic methods and modern brain imaging technologies.

Web page: <https://cimcyc.ugr.es/>

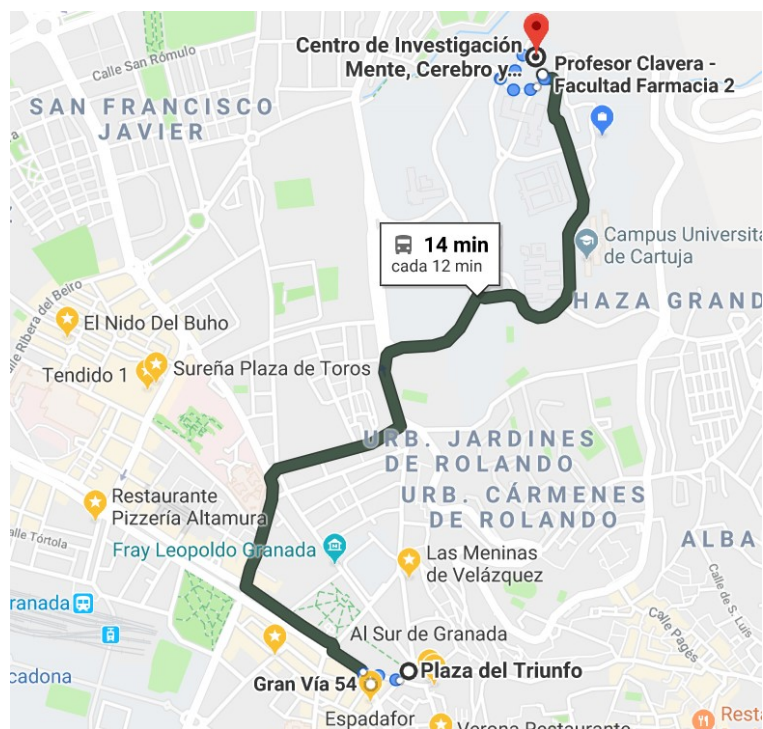
Address: C/ campus de la Cartuja S/N

<http://cimcyc.ugr.es/pages/contacto>



## Arrive to CIMCYC:

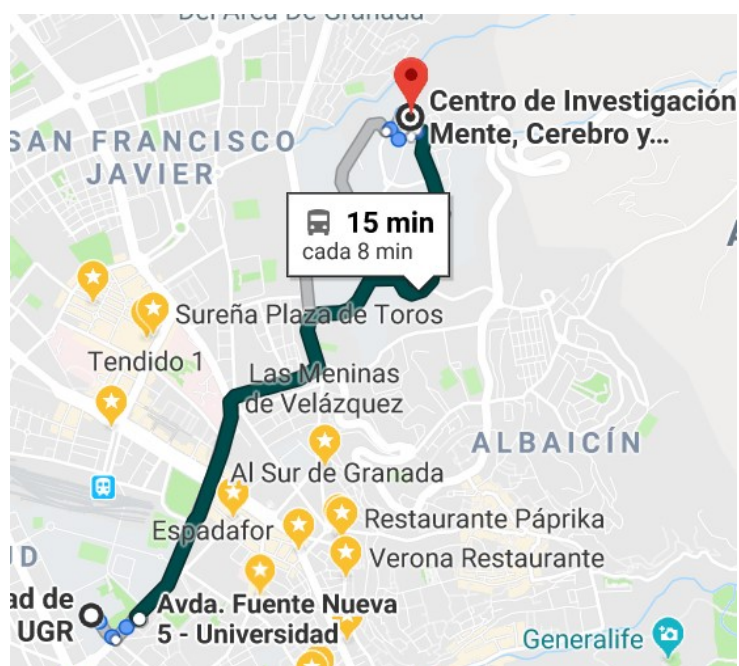
- From the city center – Plaza del Triunfo – take the bus 8.



- Other buses: U2, U3

# ENPAIR

European Network  
on Psychoeducational Assessment,  
Intervention and Rehabilitation





## **SUGGESTED PLACES FOR LUNCH –**

You can find a lot of places for lunch in Granada – almost all bars will feed you with excellent TAPAS for free with your ordered drink. TAPAS lunch is the most usual in Granada! But for those who need a proper “sitting down” meal, here you have some suggestion of typical restaurants. Restaurants will serve you a more complete meal – TAPAS bar will serve you a frugal meal (also cheaper and quicker!)

**RESTAURANTS** – for a “sitting down” lunch (BOOKING recommended).

Tendido 1 (Plaza de Toros) - Avenida Doctor Olóriz, 25; 18012, Granada

Altamura (Mediterraneanstyle) - Av. de Andaluces, 2,18014 Granada

La Tortuga Boba (Plaza Romanilla) - Plaza Romanilla, 8,18001 Granada

Restaurante El Deseo (Plaza Romanilla) - Plaza Romanilla, 20,18001 Granada

Restaurante Pizzería Verona (Italianstyle) - Calle Elvira, 108,18010 Granada

La Mafia (Italianstyle) - Calle Trajano, nº4, Local 2, 18002 Granada/Calle San Matías, nº33 Bajo, 18009 Granada

Restaurante Oliver - Plaza Pescadería, 12, 18001 Granada

Restaurante Marisquería Cunini - Plaza Pescadería, 14, 18001 Granada

**TAPAS BARS** – for a quick lunch

- Botánico Café - Calle Málaga, 3, 18001 Granada
- El Bar de Eric - Calle Escuelas, 8, 18010 Granada
- Las Meninas de Velazquez - Acera de San Ildefonso 26,18010 Granada
- Al Sur de Granada - Calle Elvira, 150,18010 Granada
- El Tablon VERDE – Calle Santa Bárbara
- Bodegas Espadafor - Calle Tinajilla, s/n,18001 Granada
- El nido del Buho (Plaza de Toros) Calle Dr. Pareja Yébenes, 10,18012 Granada
- Sureña Plaza de Toros - Calle Dr. Oloriz, 25,18012 Granada
- Los Diamantes – Calle Navas, 28.
- Cocina MediterraneaBasil (Plaza Romanilla) - Plaza Romanilla,18001 Granada
- Café Fútbol - Plaza de Mariana Pineda, 6, 18009 Granada

These are only suggestions, there are a lot of more options you can explore!

<http://en.granadatur.com/rutas-de-tapas>

<https://lacosmopolilla.com/guia-tapas-granada/>

<https://tapasengranada.es/>