improve the quality of life of children and their families. Cognitive behavioral treatments should include family and pharmacological interventions.

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Mo-S-243
The circadian rhythm alterations in childhood bipolar disorder
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This research is based on a sample of 112 patients (from 6 to 16-years-old) referred for their self-regulatory problems. Clinical interviews with patients and their families were conducted by an experienced psychiatrist and the CBCL was completed by the parents. The history of psychiatric disorders, sleep disorders and characteristics of the thyroid profile were analyzed.

Results.— The children referred for their severe dysregulated behavior (Mean of Total Problems (TP) 75.8 and 90% with Total competence score below T<37 (<10th percentile), were analyzed with the two sub-scales of dysregulation. In both groups, the sleep disorder related by parents and children were very high in CBCL-DP (46%) and in CBCL-DPSS (41.7%). The Mean of TP, if the sleep problems are present, is 93.3 and 70.4 when is absent (P=0.000). The Mean TP if the child with severe dysregulation has hypothyroidism and sleep problems (76.5 vs. 115.7) (P=0.001) seems identifies a severe sub-group.

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Mo-S-244
Sleep difficulties in anxiety disorder
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The anxiety disorder in the pediatric population; presents great difficulties sleeping in expression of symptoms. Behavioral difficulties at bedtime are often the most difficult problem to solve. Parents can send their children at camp activities, but can’t send the kids to sleep in their own bedroom; others remain long time in bed of the child until they fall asleep. The question is: are the sleep disorder an independent syndrome, or are symptoms of the anxiety disorder expression? Why do persist when the anxiety symptoms disappear, are the sub-syndromic expression? Or it is comorbidity untreated and needs a specific approach? The purpose of this presentation is focus in that direction, searching the real impact in children and the family with anxiety disorder; and compare the data of other studies of children with anxiety disorders with our outpatient from anxiety clinic.

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Innovative technologies and ASD

Mo-S-245
Jestimule, a serious game for autism spectrum disorders
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We developed a serious game to improve social cognition for a large and heterogeneous group of Autism Spectrum disorders (ASD). This study evaluated “Jestimule”, a serious game, for its effectiveness in teaching ASD individuals to recognize facial emotions, emotional gestures and emotional situations. Exploration experiments tested a group of children with ASD (n=40) who used the serious game at the hospital twice a week for four weeks. The first experiment explored a large and heterogeneous group of ASD (aged from 6 to 18) to decide who could use this serious game. The second experiment tested participants on recognition of facial emotions, emotional gestures and emotional situations.

Results.— Experiment one showed a large and heterogeneous children with ASD who could play and understand this serious game. Experiment two showed that participants improved these results in different tasks.

Conclusion.— Preliminary results have education and therapeutic implications for serious games in ASD and should be taken into account in future trainings.

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Mo-S-246
Evaluation of an intervention targeting social skills in children and adolescents with autism spectrum disorders without intellectual disability
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Introduction.— Few proposals are now available and validated to improve the social skills of individuals with a pervasive developmental disorder without intellectual disability. We have developed an intervention aiming at their progression from the analysis of video sequences. The goal is to facilitate communication within the group, sharing interests and emotions, and to improve understanding of social situations.

Methods.— Thus, we conducted an opened and uncontrolled prospective study to evaluate our intervention. The main objective is to assess the immediate effect on communication skills. The secondary objectives are to evaluate the effects on social adjustment and quality of life.

Results.— The results indicate a statistically significant increase in communication skills, in experimental and ecological situations. The evaluation of socio-adaptive behavior indicates a significant statistical increase in communication, in family and social autonomy and in leisure. The assessment of the quality of life showed no statistical changes but can identify some influencing factors.

Discussion.— The results of our study are consistent with the qualitative analysis and allow us to identify clinical applications.

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Mo-S-247
Haptic perception and haptic technologies for children with autism spectrum disorders: Where we are now and where we are heading
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Children with Autism Spectrum Disorders (ASD) often present abnormal reactions to tactile stimuli. Such reactions have an impact on social interactions, daily routines, and occupational performance. Despite these numerous implications, the tactile abnormalities of children with ASD are rarely discussed in the literature. Furthermore, the limited number of existing studies presents certain limitations (e.g. paucity of research on touch compared to vision and audition; predominant use of indirect methods; limited number of quite simple tactile stimuli used in experiments). In this communication, we will focus on a state-of-the-art review on such types of abnormalities and the associated technological aids, which are currently being developed. We will discuss both experimental and observational studies done in the fields of psychophysics, experimental, cognitive and engineering psychology, as well as Human-Computer Interaction. We will also present a reflection on the possible evolutions of these topics and fields.

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Mo-S-248
Can ICTS enhance neurocognitive processes of emotional perception in autism spectrum: Insights of event-related potentials?

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Brain imaging studies in Asian children

Mo-S-249

Effect of childhood emotional maltreatment on brain development: DTI study
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Several studies have shown that exposure to childhood abuse is associated with alterations in brain structure and function. We sought to ascertain whether childhood emotional maltreatment such as parental verbal abuse, witnessing domestic violence was associated with abnormalities in white matter tract integrity using diffusion tensor imaging. First study explored 16 unmedicated subjects with history of high-level exposure to parental verbal abuse but no other form of maltreatment and 16 healthy control subjects, showing abnormalities in arcuate fasciculus, cingulum bundle, and the fornix, which were associated with verbal IQ and many psychiatric symptoms. The second study included 20 subjects who visually witnessed domestic violence (WDV) during childhood and 27 healthy control, showing abnormalities in arcuate fasciculus, cingulum bundle, and the fornix, which were associated with verbal IQ and many psychiatric symptoms. The results showed that children with ADHD had weaker connectivity within the frontoparietal network, including connectivity between the left caudal body and bilateral insula, and between the left anterior prefrontal cortex and the superior frontal gyrus than typically developing children. Our finding of aberrant connectivity within the frontoparietal network in ADHD warrants further correlations with clinical symptoms and neuropsychological profiles to explore the biological underpinnings of the disorder.

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Transdisciplinarity and various medical cultures

Mo-S-251

Transdisciplinarity and various medical cultures: Care of young children or teenagers with serious disease in China, Italy and France
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a France
b China
c Italy

The care of young children with serious disease need different medical specialities, and complementary ways of thinking:
– to help these children use their possibilities in the best way;
– to sustain the families in looking at this special child like a child with an own rhythm in his evolution and not only as a handicapped child.

We shall take account of our different clinical experiences and way of working in our different countries, and use some clinical examples to show how working in an institution with a pluridisciplinarity staff, and in transdisciplinarity is important. In another sense, according to some clinical experiences, we could show that working uniquely in the institution can limit the way we look on the children and their possibilities, and that having an intervention from outside of the institution can give support and advice to the staff on very difficult situations.

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Using technology to deliver interventions

Mo-S-255

Sparx: A fantasy based game to treat depression
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By the age of 19, one in five adolescents will have suffered from a depressive disorder; however, most do not receive treatment. Computerised therapy has the potential to help adolescents with depression because this form of treatment can be delivered flexibly and at low cost. SPARX is an interactive 3D fantasy game designed to deliver cognitive behavioural therapy (CBT) in a computerised format (CCBT). It was developed with the help of young people. SPARX was designed for 13 to 18 year olds with mild to moderate depressive symptoms and it has been formally evaluated in a randomised controlled trial (RCT) comparing CCBT with treatment as usual (TAU) in 24 sites in New Zealand (n=187). The results of the RCT have shown that SPARX is at least as effective as usual treatment where trained therapists delivered TAU. This presentation will provide a brief overview of the development of SPARX and the results of the RCT before discussing user feedback and allowing workshop attendees to use SPARX.

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