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Studies on individuals without developmental disorder show that mental representation of self-face is subject to a multimodal process in the same way that the representation of the self-body is. People with autistic spectrum disorder (ASD) have a particular pattern of face processing and a multimodal integration deficit.

The objectives of our study were to evaluate the self-face recognition and the effect of interpersonal multisensory stimulation (IMS) in individuals with ASD. We aimed to show a self-face recognition deficit and a lack of multimodal integration among this population. IMS consisted of the presentation of a movie displaying an unfamiliar face being touched intermittently, while the examiner applied the same stimulation synchronously or asynchronously on the participant. The effect resulting from IMS was measured on two groups with or without ASD by a self-face recognition task on morphing movies made from self-face and unfamiliar-face pictures.

There was a significant difference between groups on self-recognition before stimulation. This result shows a self-face recognition deficit in individuals with ASD. Results for the control group showed a significant effect of IMS on self-face recognition in synchronous condition. This suggests the existence of an update of self-face mental representation by multimodal process. In contrast, there was no significant effect of IMS demonstrated in ASD group, suggesting a multimodal integration deficit for the constitution of self-representation in this population.

Our results show the existence of a self-face recognition deficit in individuals with ASD, which may be linked to a lack of multimodal integration in the development of the self-face representation. *Disclosure of interest* The authors have not supplied their declaration of competing interest.

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### EV334

# Sex differences in the neural basis of theory of mind during development

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Introduction Theory of mind (ToM) is the ability to predict behaviors of others in terms of their underlying mental states. It is carried out in order to make sense of and predict behavior. Impairments in ToM have been found in many psychiatric/neurological disorders including schizophrenia and autism spectrum disorders. Previous research has indicated sex difference in ToM development. Previous research has also found some differences in the neural basis of ToM.

Objectives/aims An objective/aim of the present study was to examine possible sex differences in the neural mechanism associated with ToM development. Another objective was to examine the neural basis of ToM that is shared by both sexes throughout development.

Methods Thirty-two adults (16 women) and 24 children (12 girls) were assessed with fMRI while performing a false belief (FB) task. Results During the ToM relative to non-ToM condition, adults and children of both sexes showed increased activity in the medial prefrontal cortex (mPFC) and the temporo-parietal junction (TPJ). Both boys and girls recruited more brain regions than adults. Moreover, children employed structures involved in the human mirror neuron system (hMNS) more than adults. More specifically, boys recruited the inferior frontal gyrus (IFG) more than men, while girls recruited the precentral gyrus more than women.

Conclusions These results suggest that boys/men and girls/women employ different brain regions for ToM during development.

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#### FV335

# Instructional influence on learning and decision making with respect to cognitive functioning

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Introduction Humans learn how to behave both through rules and instructions (explicit learning) as well as through environmental experiences (implicit learning). It has been shown that instructions can powerfully control people's choices, often leading to a confirmation bias.

*Aim* To explore confirmation bias with respect to cognitive functioning in healthy adult participants.

Methods We recruited 25 healthy adult control subjects (9 males, 16 females, age  $31.40 \pm 6.08$  years). Participants completed Repeatable Battery of Neuropsychological Status (RBANSS) as well as Instructed Version of Probabilistic Selection Task (IPST) (Doll et al., 2009).

Results Based on the performance on IPST into two groups: a group with higher and lower susceptibility to confirmation bias. We found no difference between these groups with respect to any of the cognitive domains measured with RBANSS (immediate memory, visuospatial abilities, language, attention and delayed memory) (*U* Mann-Whitney test, *P* > 0.05).

Conclusion In healthy adults, susceptibility to confirmation bias is independent of cognitive functioning (immediate and delayed memory, visuospatial abilities, language and attention).

*Disclosure of interest* The authors have not supplied their declaration of competing interest.

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### EV336

## Relationship between executive functions and adherence to antiretroviral therapy in HIV-infected patients

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Introduction HIV-related damage of the central nervous system is manifested in varying severity of neurocognitive disturbances. Research on measures of executive functioning has confirmed that HIV infection is associated with progressive difficulties in these abilities. Moreover, several studies in recent years have shown that an impaired cognitive function confers a higher risk of poor adherence to antiretroviral therapy.

*Objectives/Aims* The aim of this study is to analyze the relationship between executive functions and ART compliance.

Methods We designed a cross-sectional case-control survey. Cases were defined as HIV-infected patients who missing at least 10% intakes in the last year (reported by hospital pharmacy) and self-reported non-adherence by Simplified Medication Adher-