

**S53.3**

Alexithymia and lateralized presentation of emotional faces

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We tested whether alexithymia involves a right hemisphere deficit or impaired interhemispheric transfer. In 2 studies of college students, we assessed alexithymia (Toronto Alexithymia Scale-20), tachistoscopically flashed prototypic emotional faces to right or left visual fields, and recorded accuracy and reaction time. In study 1, 64 subjects (20 men) saw happy, angry, or neutral faces in 96 trials and responded whether or not the face was "emotional" using their ipsilateral or contralateral hand. Although alexithymia predicted more errors in recognizing anger overall ( $r=.27$ ,  $p=.03$ ) especially among women, alexithymia was unrelated to intra or interhemispheric effects. In study 2, 44 subjects (23 men) saw angry, fearful, sad, or happy faces in 128 trials and verbally reported the emotion. Although alexithymia was unrelated to the differential performance of the hemispheres, the sexes differed in alexithymia's relationship to overall accuracy. Among women, alexithymia predicted lower accuracy ( $r=-.60$ ,  $p=.004$ ), but among males, alexithymia predicted higher accuracy ( $r=.48$ ,  $p=.02$ ); these findings held for both hemispheres and all emotions. We find no support for alexithymia's relationship to intra or interhemispheric deficits in facial emotion processing, but alexithymia may predict emotion recognition differently for the sexes.

**S53.4**

Interhemispheric transfer in alexithymia

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Previous studies have investigated dysfunctions of interhemispheric communication in alexithymia by means of finger-localisation tasks and found a bidirectional transfer-deficit in male, right-handed, alexithymic individuals. Using a transcranial magnetic stimulation approach we investigated 8 right-handed alexithymic males (TAS-20>61) and 13 controls. The left to right transfer was significantly faster in the alexithymic males (T-Test;  $T=2.5$ ;  $df=19$ ;  $p=0.022$ ) indicated by a shorter latency of transcallosal inhibition (LTI). Our results suggest that alexithymia may involve cortical asymmetry with an enhanced left to right transfer of inhibitory activity which may suppress the processing of emotional stimuli in the right hemisphere.

**S53.5**

The relevance of dissociative symptomatology in assessing the interhemispheric transfer

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Given the associations between dissociation, alexithymia and trauma-related states, we tested the hypothesis that dissociation may involve dysfunctions of interhemispheric communication using a transcranial magnetic stimulation approach. In 67 right-handed students, we assessed motor thresholds and onset latency of transcallosal inhibition (LTI).

All subjects completed the Dissociative Experience Scale (DES). High dissociators had a significantly lower left than right hemispheric excitability, which was absent in low dissociators. High

dissociators had a significantly earlier LTI of the left side indicating a faster information transfer from the right to the left hemisphere than low dissociators. Our results suggest that dissociation may involve cortical asymmetry with the left hemisphere having a lower excitability and a right hemispheric superiority to inhibit the left one on activation.

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## SES14. AEP Section Epidemiology & Social Psychiatry – Psychiatric-somatic comorbidity – cases and effects

*Chairs: C. Sørensen (DK), A. Magnusson (N)*

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**SES14.1**

Health is not given – patterns of 12 month somatic and mental disorders comorbidity in the community

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Cross-sectionally and over the lifespan, the vast majority of the population is affected by either somatic disorders or mental disorders or a combination of both. Even when using quite strict threshold definitions only 20 to 30% of the population can be described as by and large "healthy". The recent German Health Interview and the Examination Survey (sample size 7,200) revealed the dominant patterns of morbidity and impairment and disability, and revealed that most mental disorders are associated with greater average work impairment than most somatic conditions. The high degree of morbidity and comorbidity calls for a rethinking of our health service provision models as well as healthy psychology concepts.

**SES14.2**

Schizophrenia, autoimmune diseases and human leucocyte antigens

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Epidemiological studies provide evidence that autoimmune diseases occur with either greater (thyrotoxicosis, insulin dependent diabetes mellitus) or lesser (rheumatoid arthritis) frequency in patients with schizophrenia and their first degree relatives. Many autoimmune diseases are associated with specific human leucocyte antigens (HLA). HLA are encoded on the short arm of chromosome 6 in the 6p21.3 band and a schizophrenia susceptibility locus has been reported near this region. We have therefore undertaken extensive association and transmission disequilibrium studies of schizophrenia and HLA (Li T et al. Transmission disequilibrium analysis of HLA class II DRB1, DQA1, DQB1 and DPB1 polymorphisms in schizophrenia using family trios of a Han Chinese population. *Schizophr Res* 2001;49:73–78) and have reported negative associations between schizophrenia and DRB1\*04 and DQB1\*0602.