



Congrès

**INTERVENTION
PRÉCOCE ET
PRÉVENTION DES
PSYCHOSES**

Connaissances
actuelles
et orientations
futures

Conference

**EARLY
INTERVENTION
IN PSYCHOSIS**

Current knowledge
and future
directions

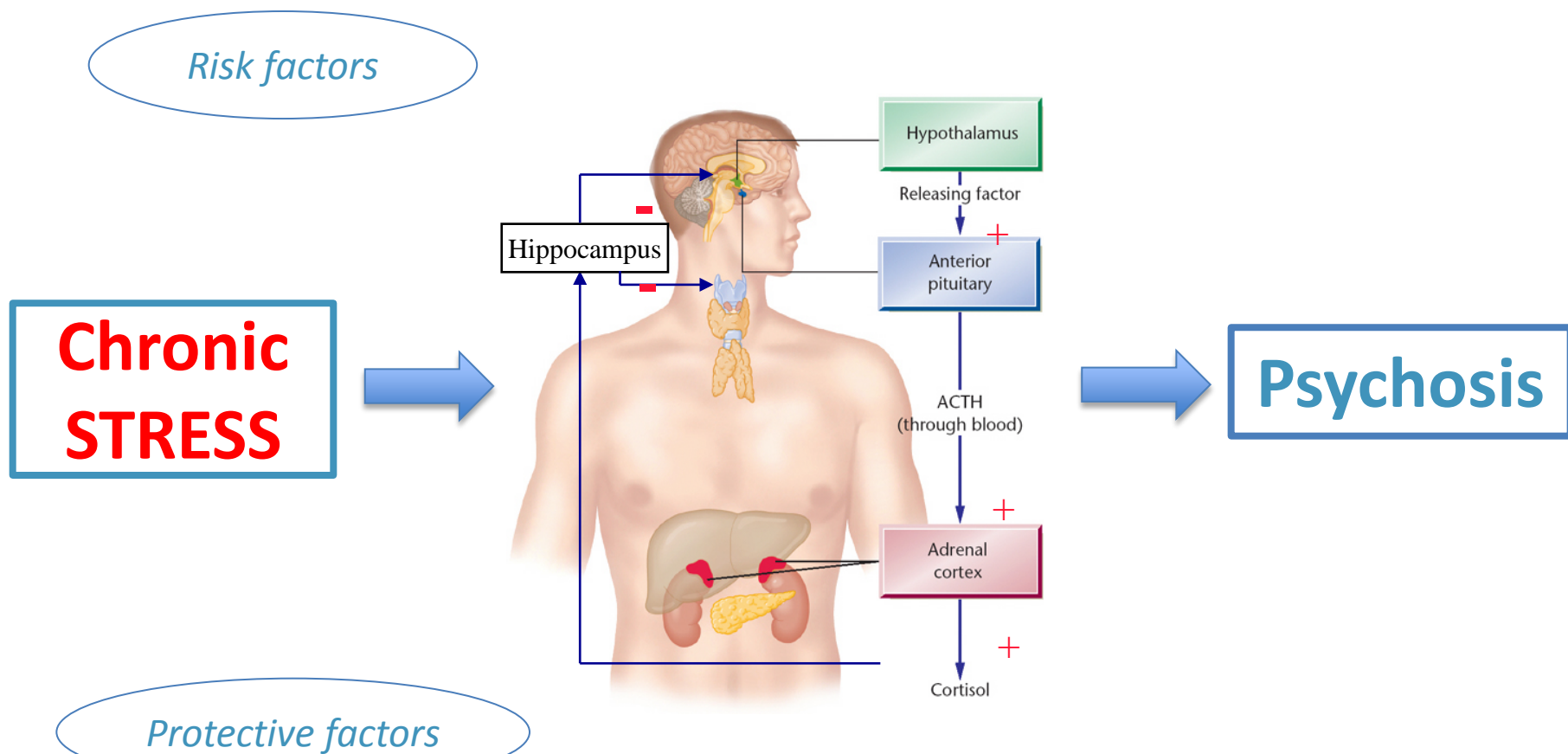
*“Psychological and biological
correlates of stress in ultra-
high risk and first episode
psychosis patients”*

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PEOPLE INVOLVED IN THE PROJECT

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- Kia Faridi
- Srividya Iyer
- Nadia Vracotas
- Yvonne Chezchowska
- Nicole Pawliuk
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STRESS, HPA AXIS AND PSYCHOSIS



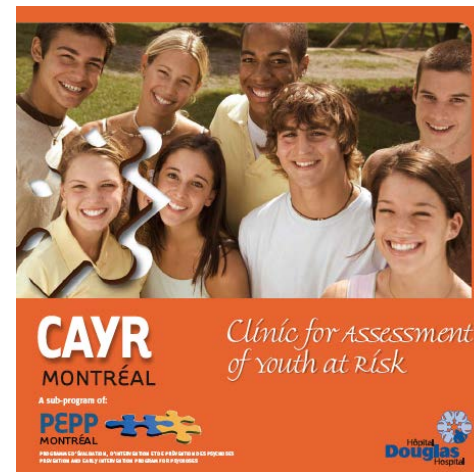
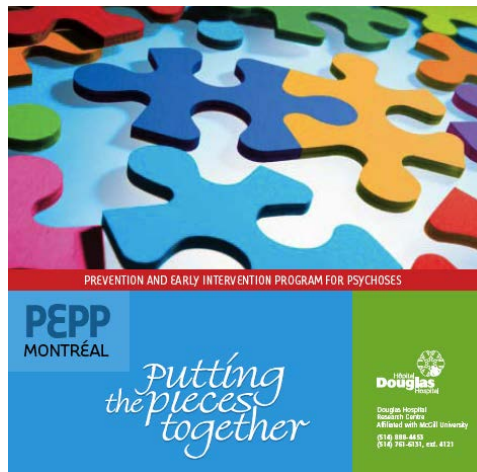
RESEARCH QUESTIONS:

- 1) What are the differences between individuals at ultra-high risk for psychosis and first episode psychosis in stress and cortisol levels?
- 2) Are abnormal stress and cortisol levels related to symptoms and hippocampal volume in these patients?
- 3) What are potential risk and protective factors, and what role do they play in the relationship of stress, cortisol on outcome?
- 4) Are there gender differences in stress, cortisol levels and protective factors?
- 5) Can our findings guide the development of interventions at the high risk stage?

METHODS:

- **Participants**

- 119 FEP patients (82 men, 37 women; age 22.69 3.93)
- 45 individuals at UHR (26 men, 19 women; age 19.35 3.68)
- 50 healthy controls (25 men, 25 women; age 22.47 3.86)



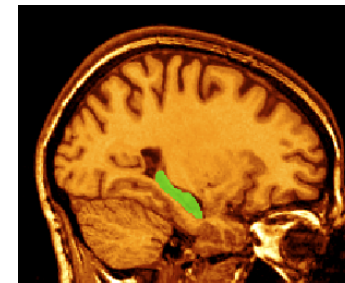
PSYCHOLOGICAL AND SYMPTOM MEASURES:

- **Stress**
 - Chronic stress in the past month (TICS; Schulz & Schlotz; 1999)
- **Protective factors**
 - Self-esteem (SERS; Nugent & Thomas, 1993)
 - Coping style (Brief COPE; Carver, 1997)
 - Social support (MSPSS; Zimet et al., 1988)
- **Symptom assessment**
 - BPRS (Ventura et al., 1993; Kopelowicz, 2008)
 - Global Assessment of Functioning (GAF; Luborsky, 1962)
 - Depression (HDI)
- **Early life adversity**
 - The Parental Bonding Instrument (PBI; Parker et al., 1979)

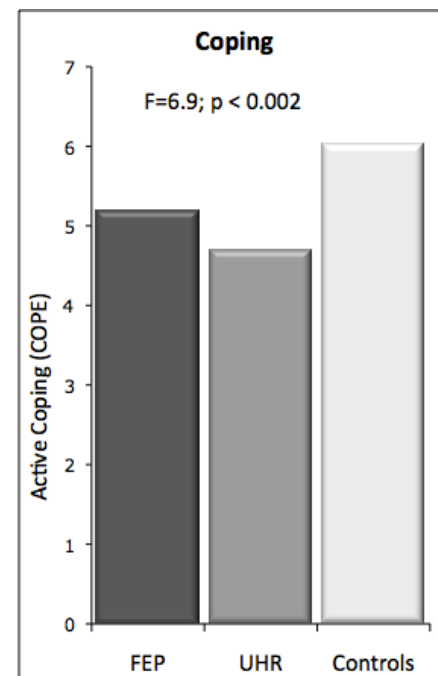
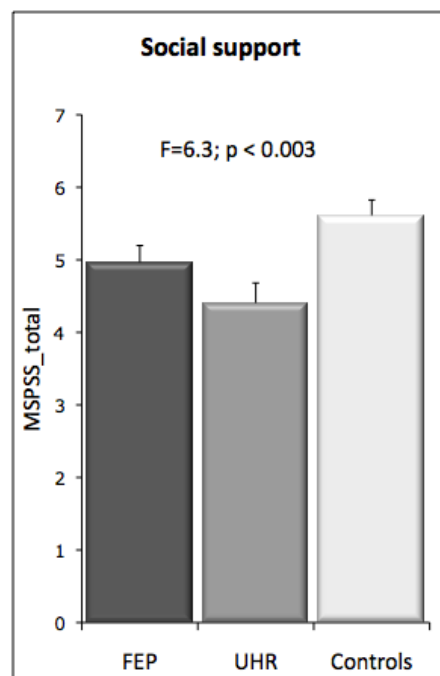
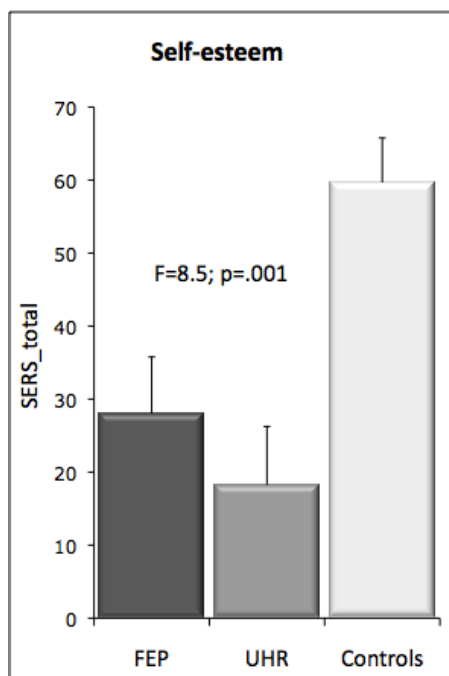
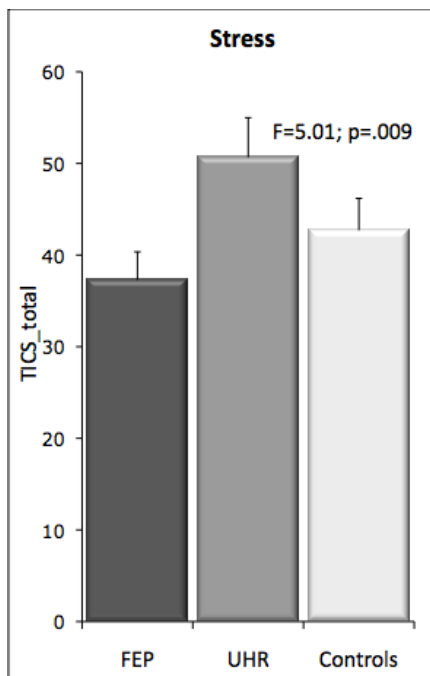


BIOLOGICAL MEASURES:

- The Cortisol Response to Awakening (CAR)
- The Trier Social Stress Test (TSST)
- Hippocampal volume



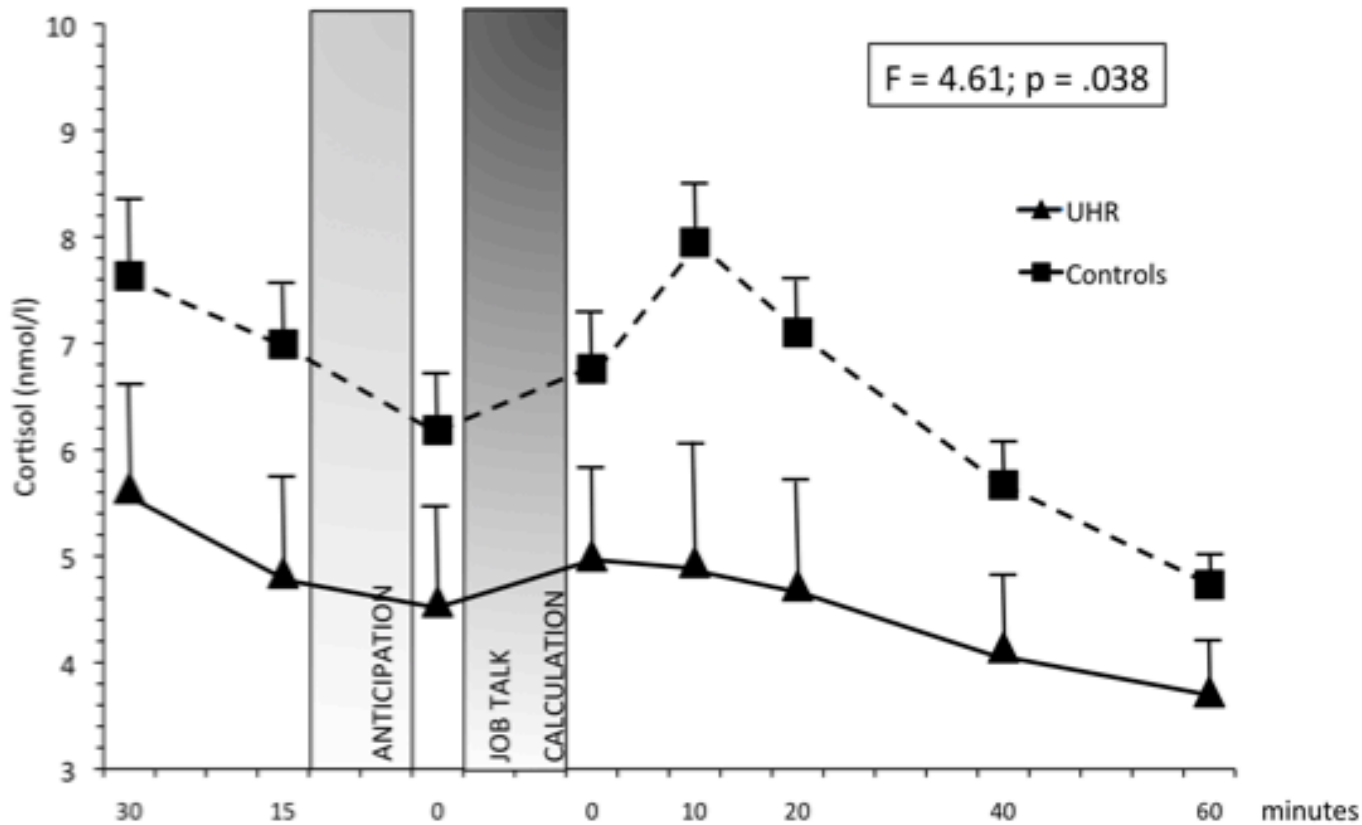
STRESS AND PROTECTIVE FACTORS:



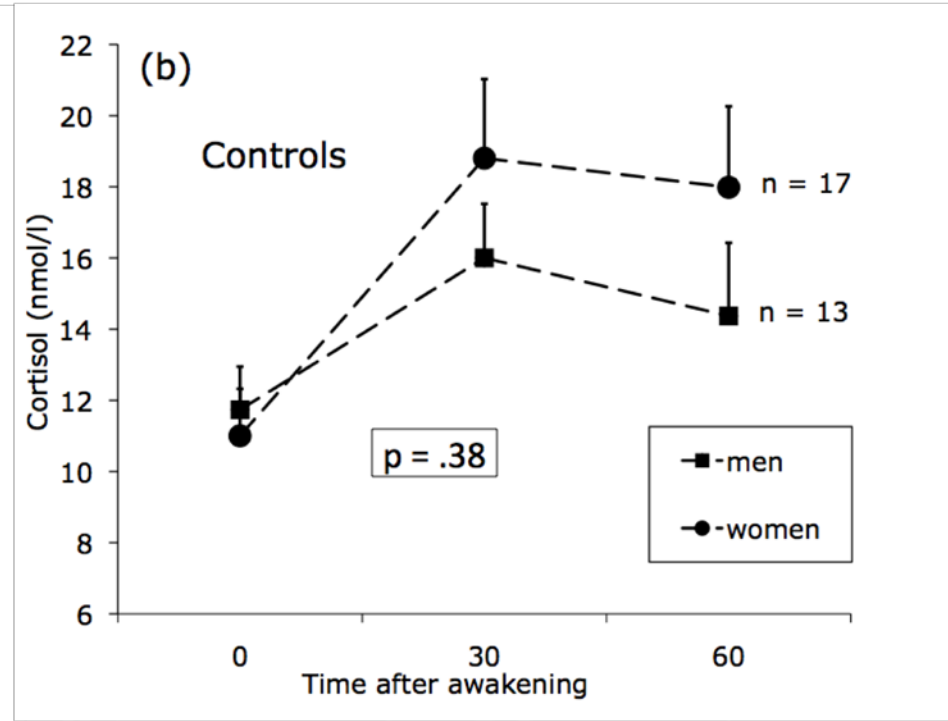
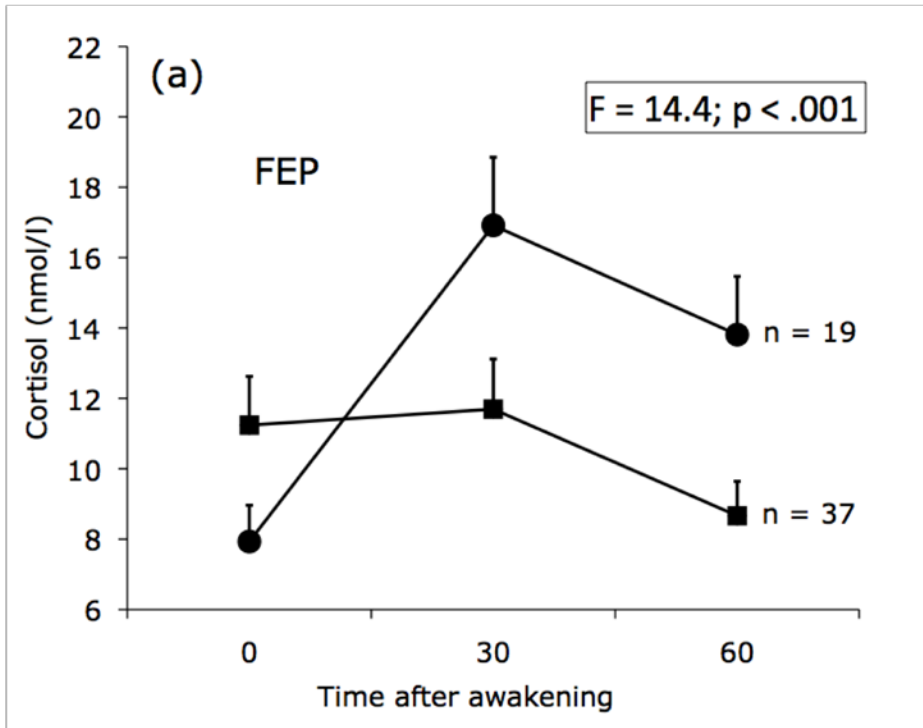
STRESS AND SYMPTOMS

		BPRS_tot	BPRS_pos	BPRS_neg	BPRS_dep	GAF
UHR	TICS	.49**	.39*	.27	.48**	-.20
	SERS	-.53**	-.38*	-.26	-.52**	.39*
	MSPSS	-.45*	-.34	-.37*	-.31	.62**
	Act Cope	-.25	-.07	-.45*	-.36	.27
FEP	TICS	.27	.31	.16	.32	.15
	SERS	-.43*	-.26	-.21	-.54**	.11
	MSPSS	-.12	-.06	-.06	-.14	.22
	Act Cope	-.14	-.05	-.21	-.19	.14

THE TSST IN UHR

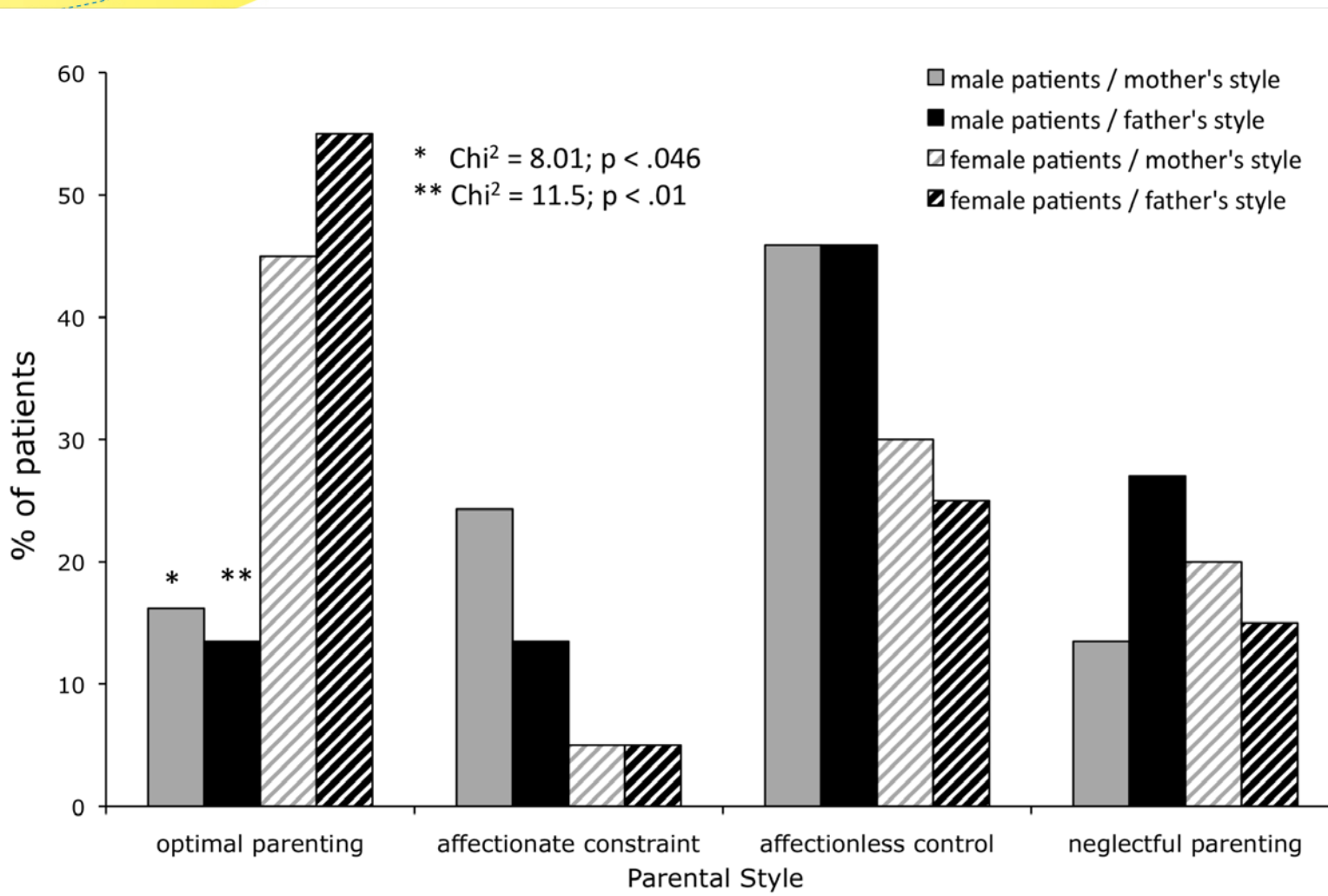


THE CORTISOL AWAKENING RESPONSE IN FEP

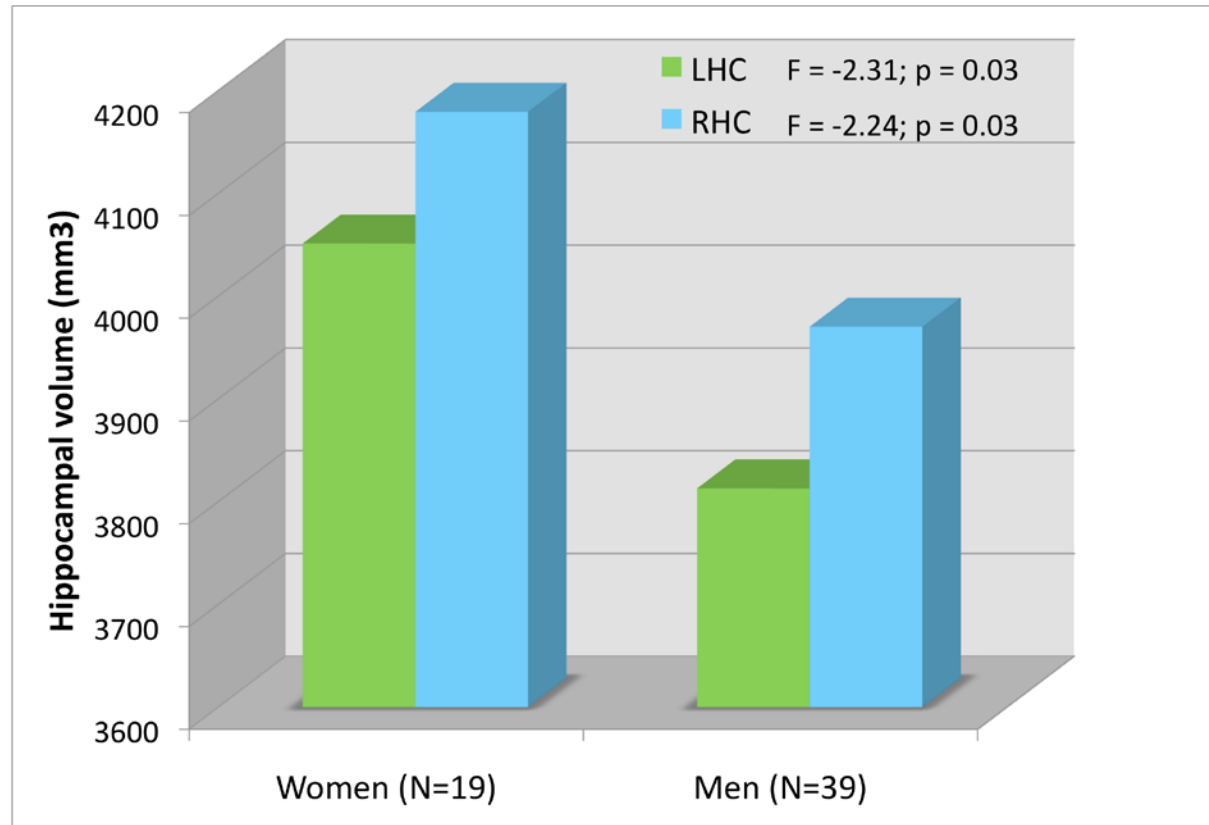
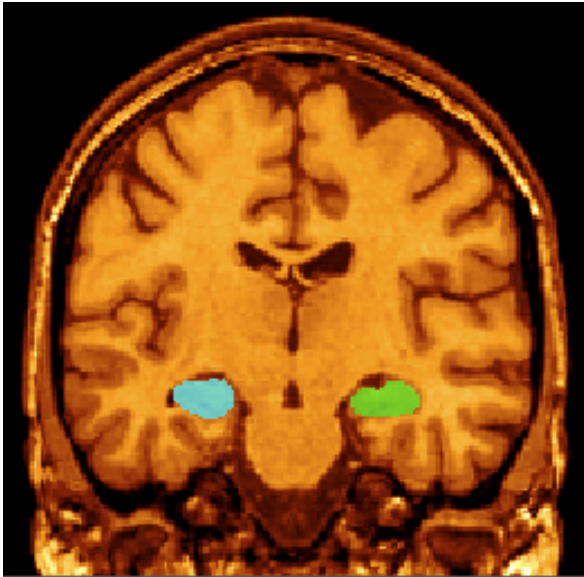




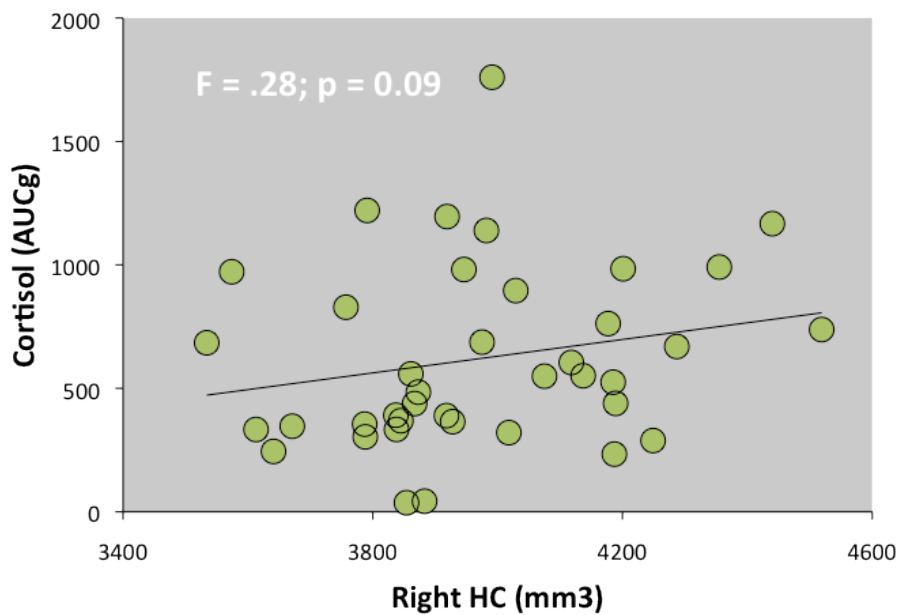
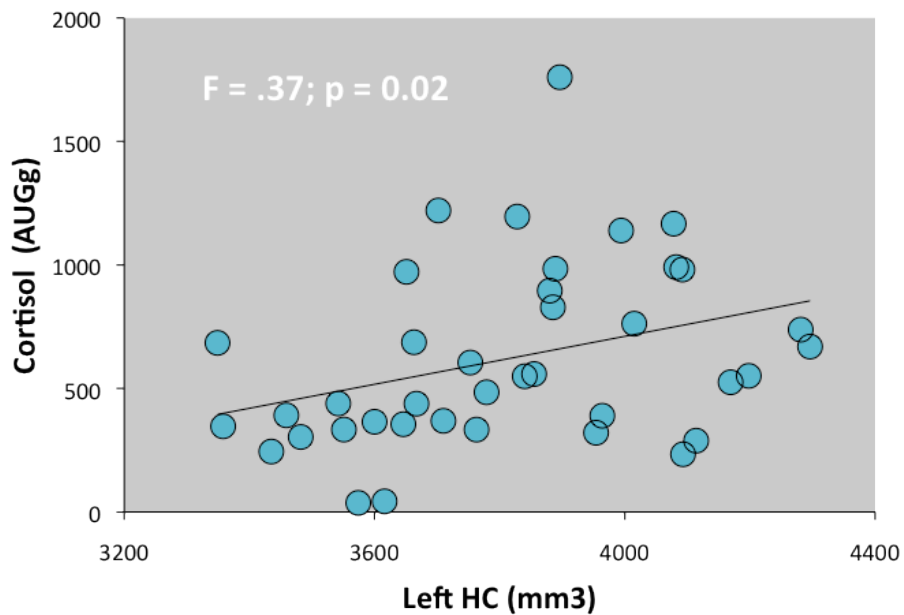
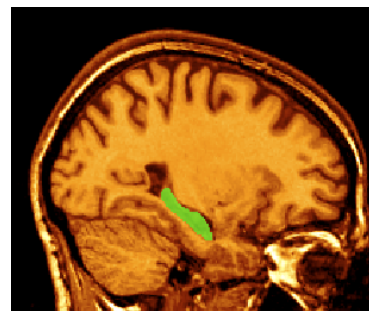
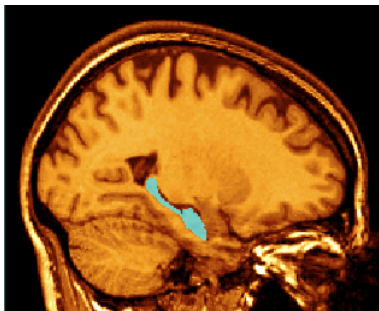
PARENTAL STYLE IN FEP



HIPPOCAMPAL VOLUME AND CORTISOL



HIPPOCAMPAL VOLUME AND CORTISOL



CONCLUSIONS

- In both UHR and FEP patients, we found evidence for attenuated cortisol levels
- Such attenuated cortisol responses ...
 - are in contrast to the common notion of hypercortisolism in these conditions
 - could indicate a desensitization of the HPA axis following chronic stress
 - are likely inadequate to allow metabolic and psychological adjustment to the demands of the situation
 - might contribute to the development of psychotic symptoms

CONCLUSIONS

- Our findings in FEP suggest a greater vulnerability to stress in male compared to female patients
- The observed sex differences might be related to the less favorable outcome in male patients in many domains
- Future studies should ...
 - consider the patients' sex
 - investigate HPA activity at different levels
- Both patients groups might benefit from interventions focusing on balancing HPA activity, stress reduction and strengthening of protective factors

Thank you!

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