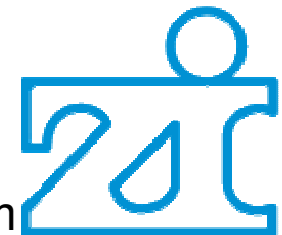




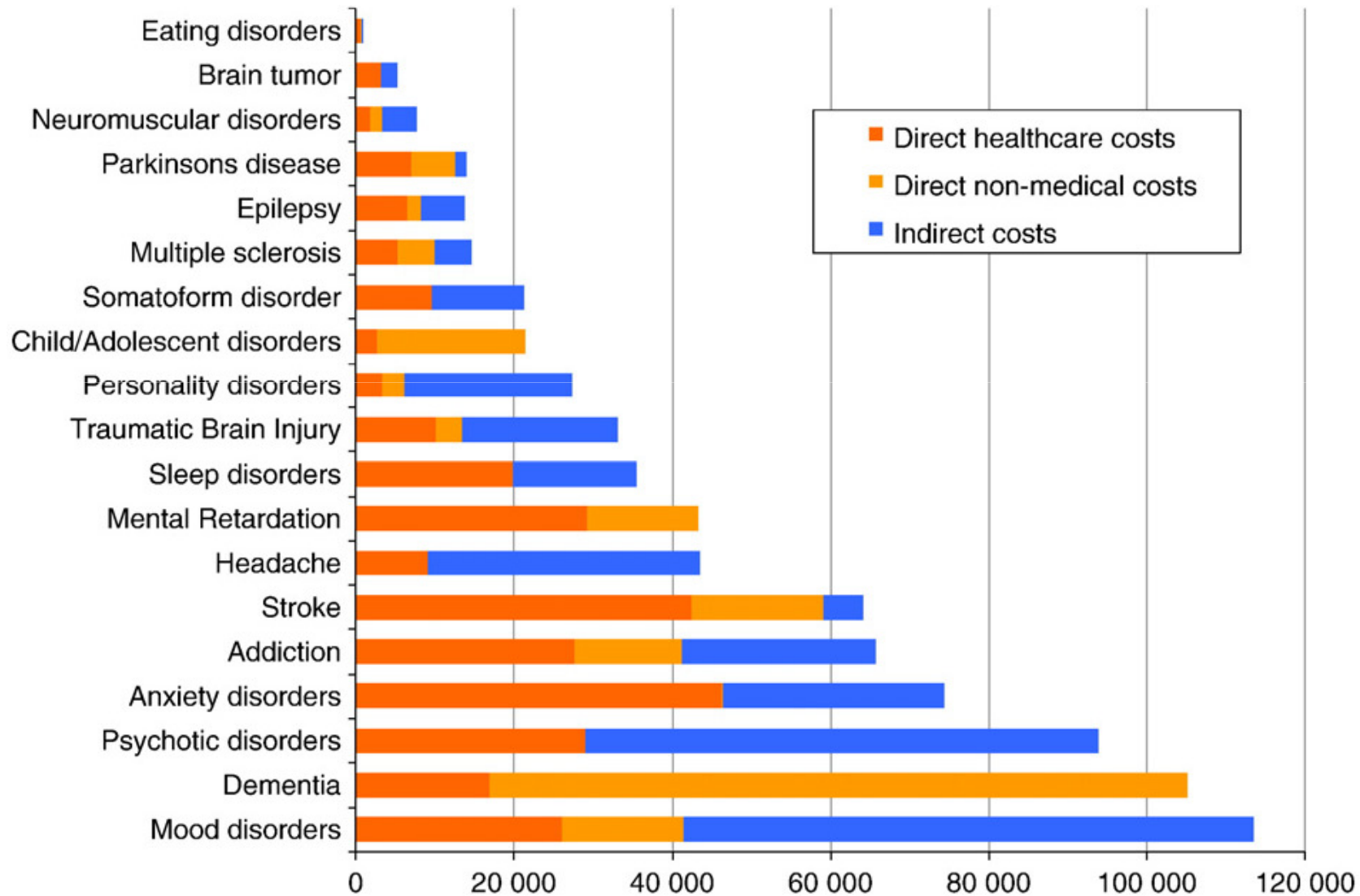
Münster, 15.5.2014

Psychische Krankheit: Modelle der Neurobiologie und Genetik

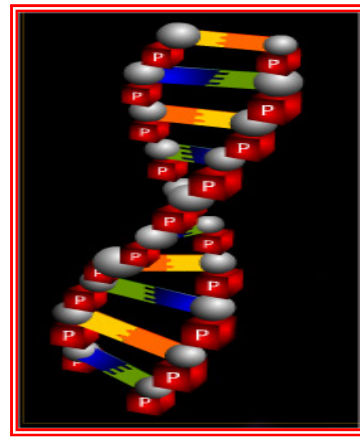
Andreas Meyer-Lindenberg ML
Zentralinstitut für Seelische Gesundheit, Mannheim



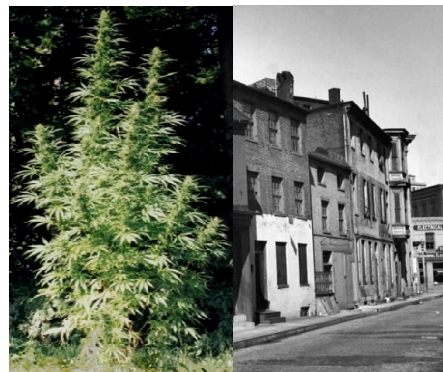
Kosten neuropsychiatrischer Krankheiten in Europa 2010 (€ PPP Mio)



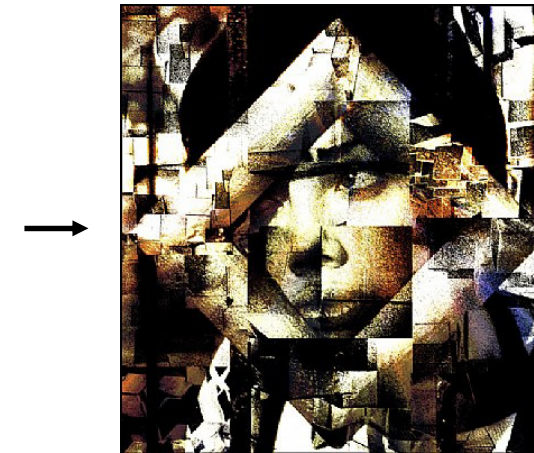
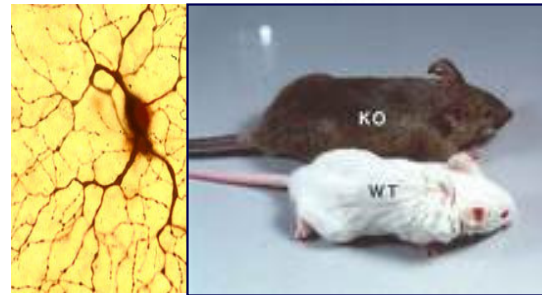
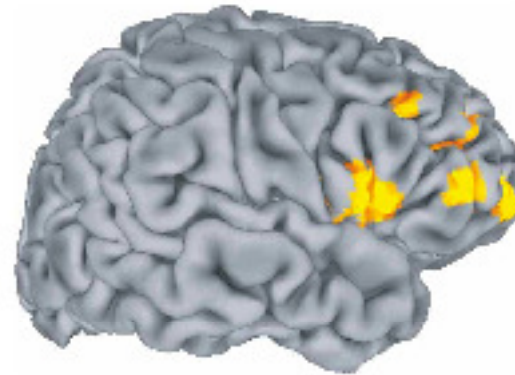
Gene und Umwelt: Kausalfaktoren des Erkrankungsrisikos



Gene

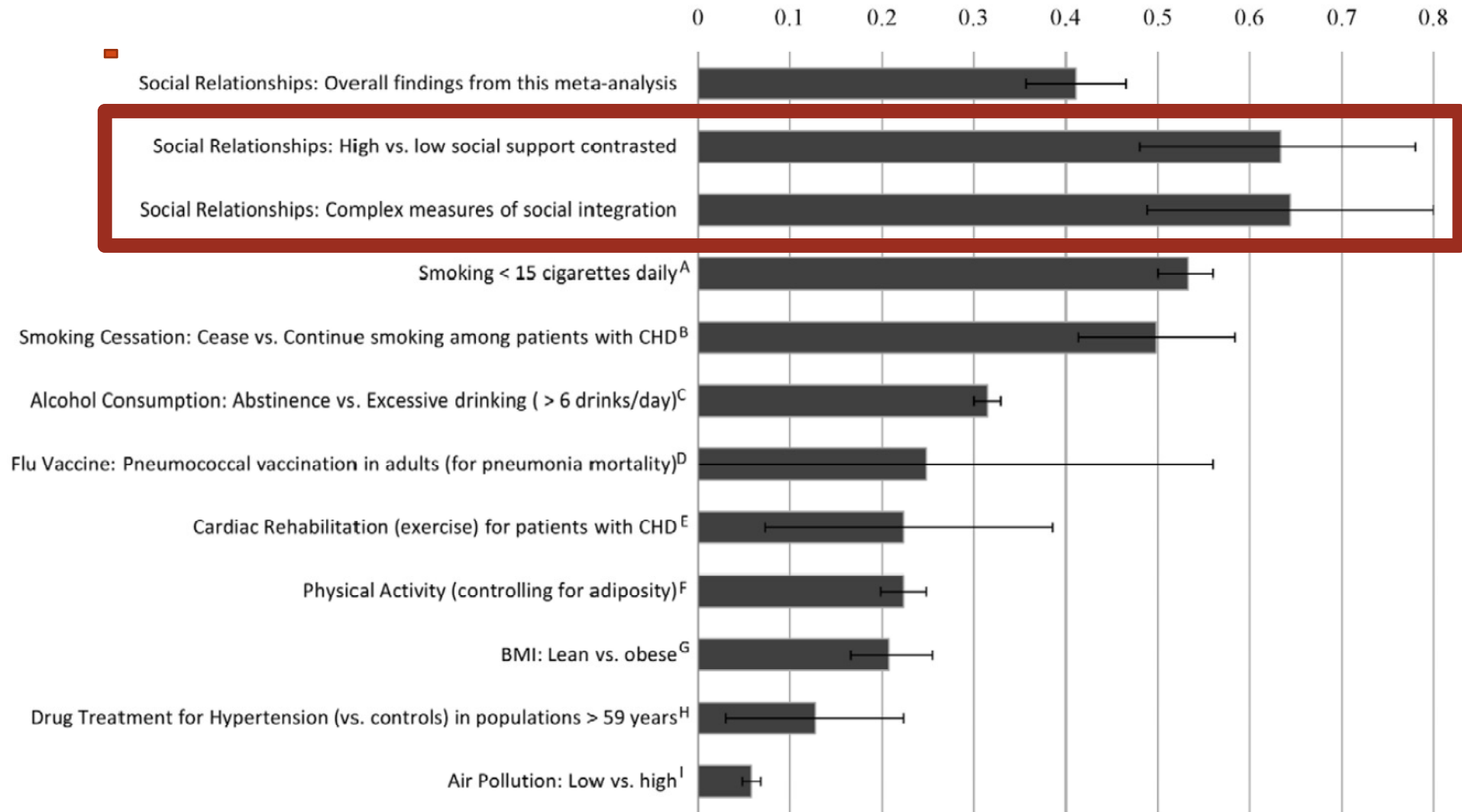


Umwelt





Soziales Umfeld und Langlebigekeit

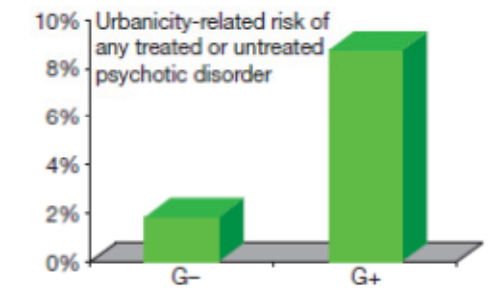
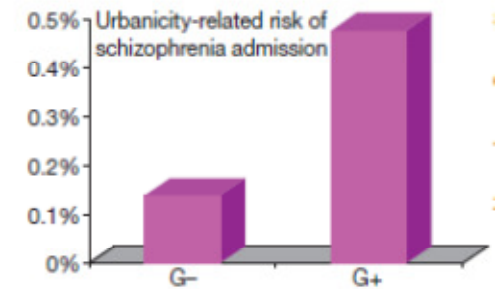
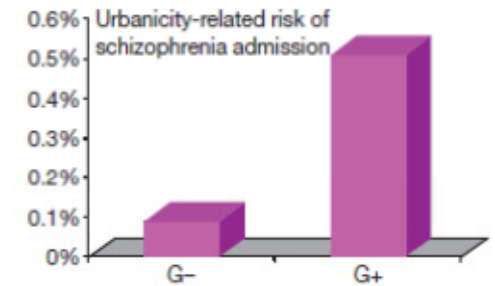
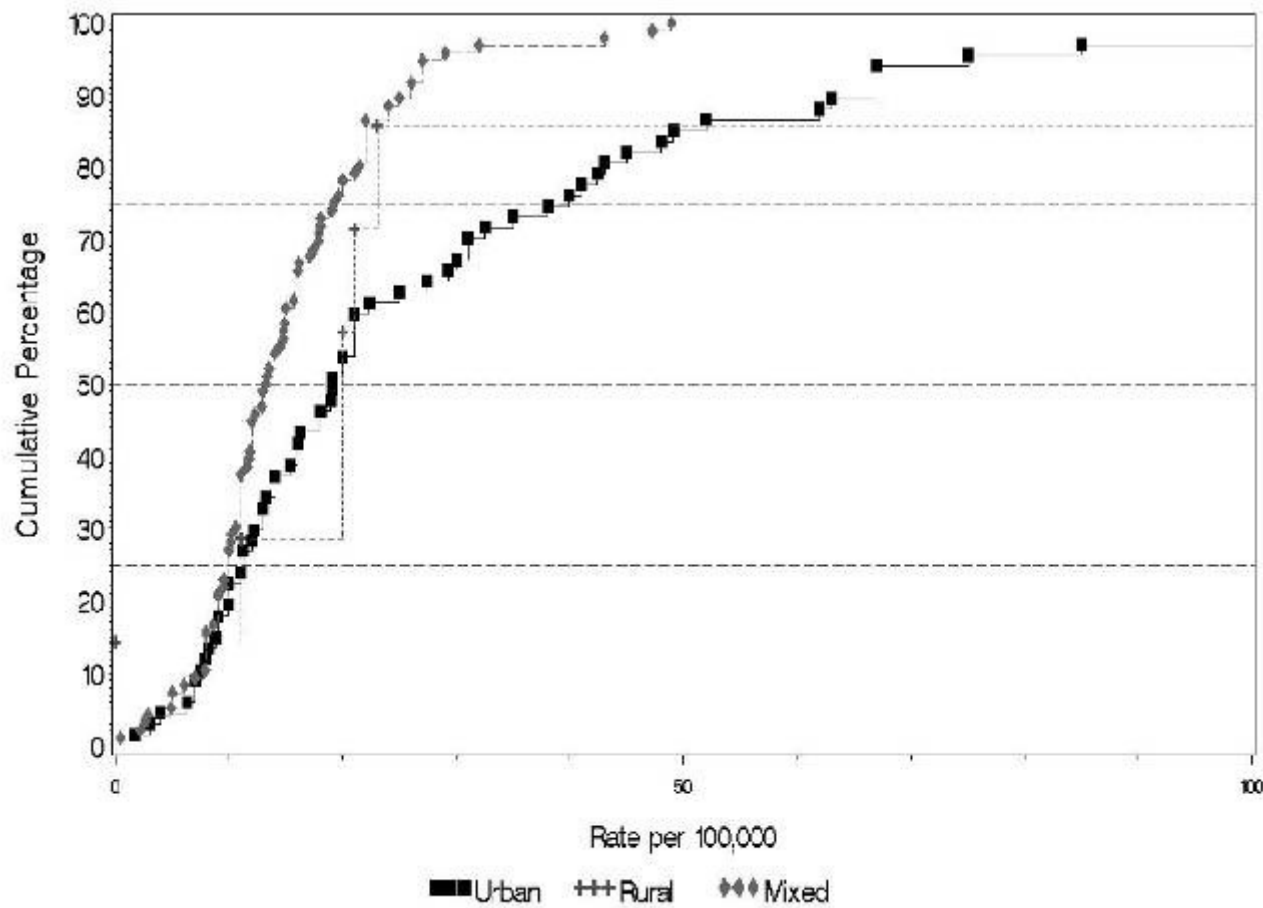


Stadt-Land-Unterschiede

Table 2: Prevalence of psychiatric disorders in the last 12 months in adults (18–65 years of age) in Germany in relation to urbanization in 1999 (weighted percentages with standard error)

	Urbanization		Very Urban		Urban		Rural		Very Rural		p for trend
	Extremely urban N = 1169 %	Se	N = 849 %	Se	N = 888 %	Se	N = 661 %	Se	N = 614 %	Se	
any mood disorders	15.2% (178)	1.1%	12.4% (105)	1.2%	10.6% (94)	1.0%	9.8% (65)	1.1%	9.3% (57)	1.1%	.000
major depressive disorder	11.1% (130)	0.9%	7.7% (65)	1.0%	6.9% (61)	0.8%	7.5% (50)	1.0%	6.8% (42)	1.0%	.001
any bipolar disorder	1.2% (14)	0.3%	1.2% (10)	0.4%	0.5% (4)	0.2%	0.5% (3)	0.3%	0.3% (2)	0.2%	– *
dysthymia	4.8% (56)	0.6%	5.4% (46)	0.8%	4.6% (41)	0.7%	3.7% (24)	0.7%	3.2% (20)	0.7%	.047
any anxiety disorders	16.9% (198)	1.1%	12.6% (107)	1.2%	14.8% (131)	1.1%	14.3% (95)	1.4%	12% (74)	1.3%	.024
social phobia	2.6% (30)	0.5%	2% (17)	0.5%	1.5% (13)	0.4%	2.5% (17)	0.6%	1.1% (7)	0.4%	.086
any simple phobia	7.9% (92)	0.8%	7.2% (61)	0.9%	7.3% (65)	0.8%	7.6% (50)	1.0%	8.2% (50)	1.1%	.895
generalized anxiety disorder	2.1% (25)	0.4%	1.3% (11)	0.4%	1.5% (13)	0.4%	1.3% (9)	0.4%	0.9% (6)	0.4%	.065
obsessive compulsive disorder	0.9% (11)	0.3%	1.1% (9)	0.4%	0.8% (7)	0.3%	0.4% (3)	0.3%	0.1% (1)	0.1%	– *
panic disorder with/without agoraphobia	2.7% (32)	0.5%	2.6% (22)	0.6%	2.4% (21)	0.5%	2.4% (16)	0.6%	1.3% (8)	0.4%	.098
any somatoform disorder/syndrome	13.7% (160)	1.0%	13.5% (115)	1.2%	9.7% (86)	1.0%	8.2% (54)	1.1%	7.4% (45)	1.0%	.000
SSI4.6	5.6% (65)	0.7%	5.9% (50)	0.8%	3.3% (29)	0.6%	2.9% (19)	0.6%	2.8% (17)	0.6%	.000
pain disorder	9.8% (115)	0.9%	9.7% (82)	1.1%	7.6% (67)	0.9%	6.5% (43)	1.0%	5.4% (33)	0.9%	.000
any substance disorder	5.1% (60)	0.7%	3.7% (31)	0.7%	3.6% (32)	0.6%	4.9% (32)	0.8%	5.1% (31)	0.8%	.920
alcohol abuse or dependence	4.3% (50)	0.6%	3.8% (32)	0.7%	3.1% (28)	0.6%	4.9% (32)	0.8%	4.7% (29)	0.8%	.556
alcohol dependence	3.4% (40)	0.5%	3.1% (26)	0.6%	2.3% (20)	0.5%	4.3% (28)	0.8%	4% (25)	0.8%	.386
illicit drug abuse/dependence	1% (12)	0.3%	0.5% (4)	0.3%	0.8% (7)	0.3%	0.2% (1)	0.2%	0.8% (5)	0.3%	– *
possible psychotic disorder	2.4% (28)	0.5%	3.5% (30)	0.7%	2.6% (23)	0.5%	2.7% (18)	0.6%	1.4% (9)	0.5%	.208
any mental disorder	36.4% (426)	1.5%	31% (263)	1.7%	29.4% (261)	1.5%	28.3% (187)	1.7%	26.6% (163)	1.7%	.000

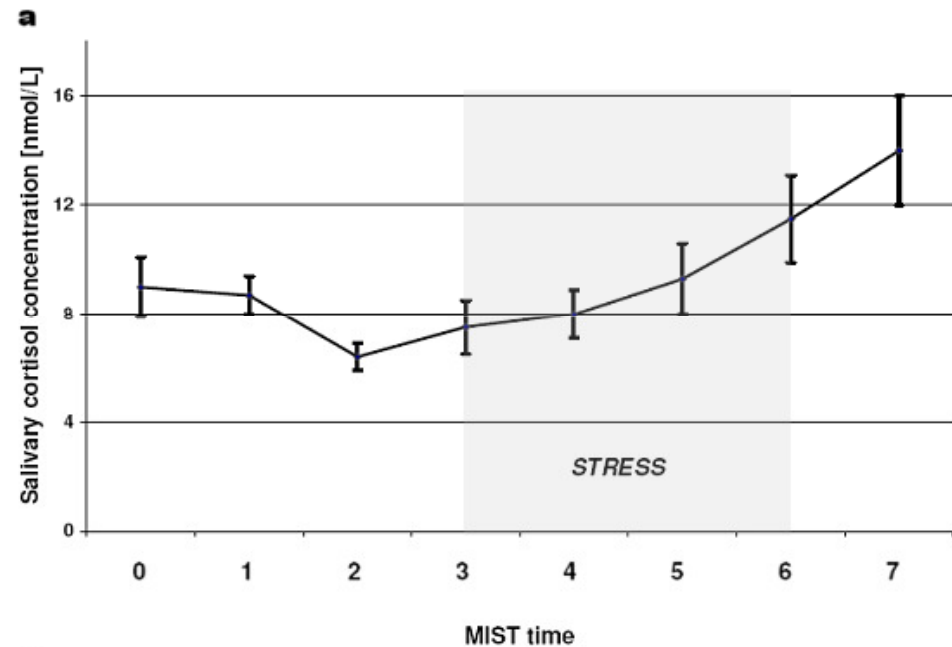
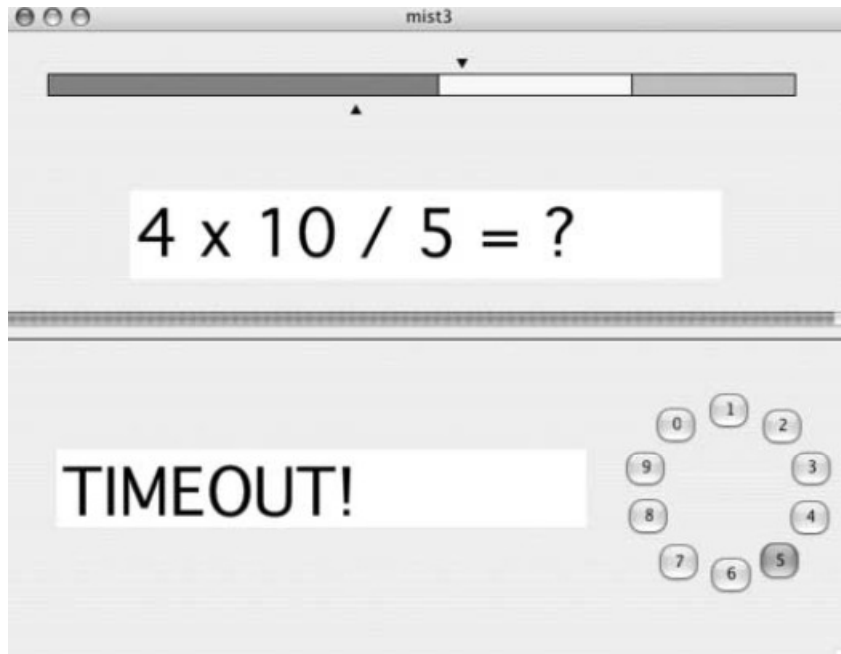
Stadt(geburt) und Schizophrenierisiko



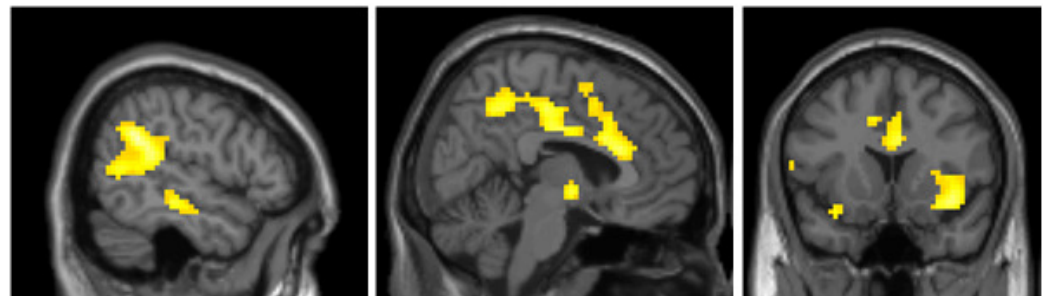
McGrath *et al.* **BMC Medicine** 2004

van Os *et al.* **Nature** 2010

Montreal Imaging Stress Task

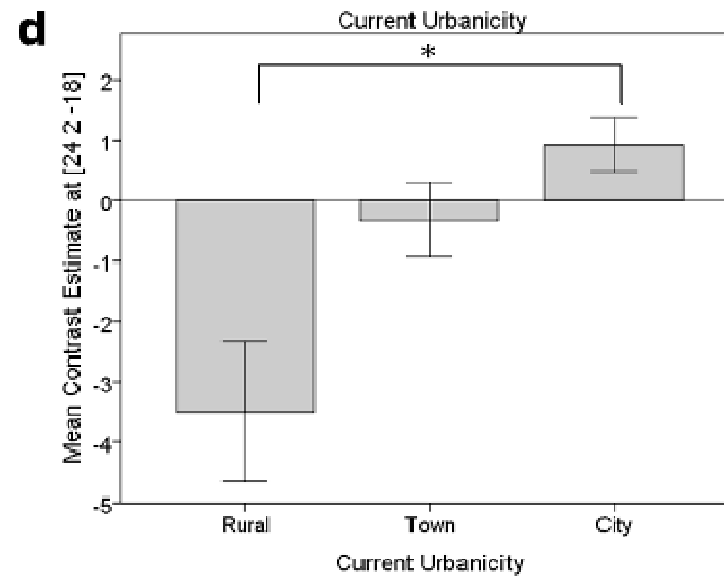
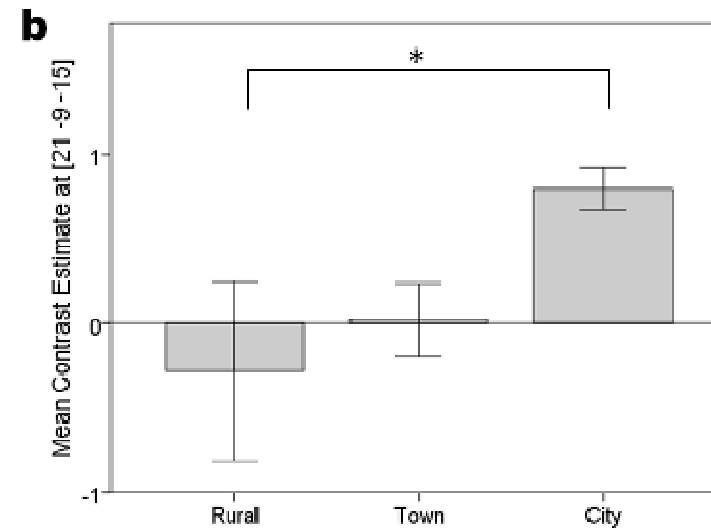
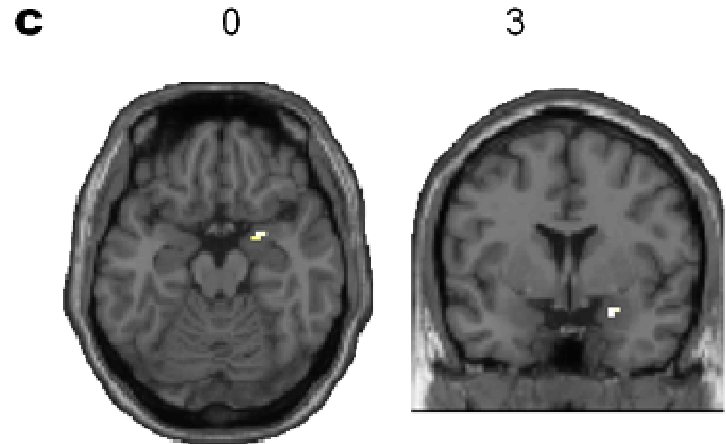
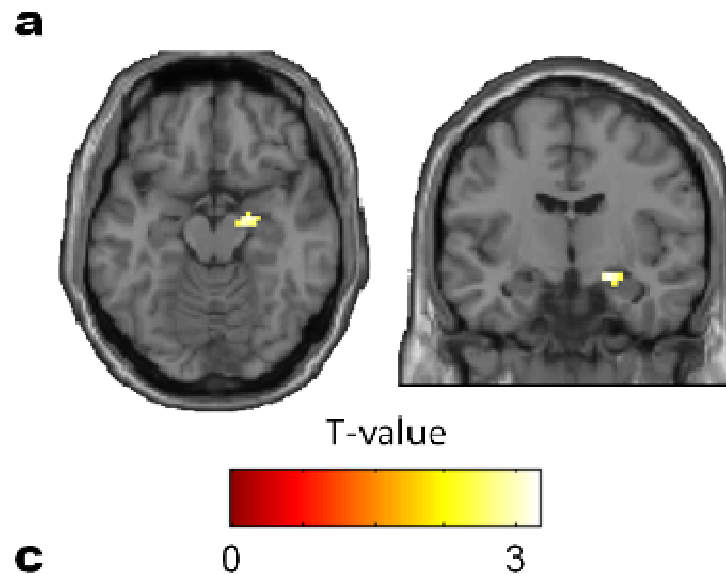


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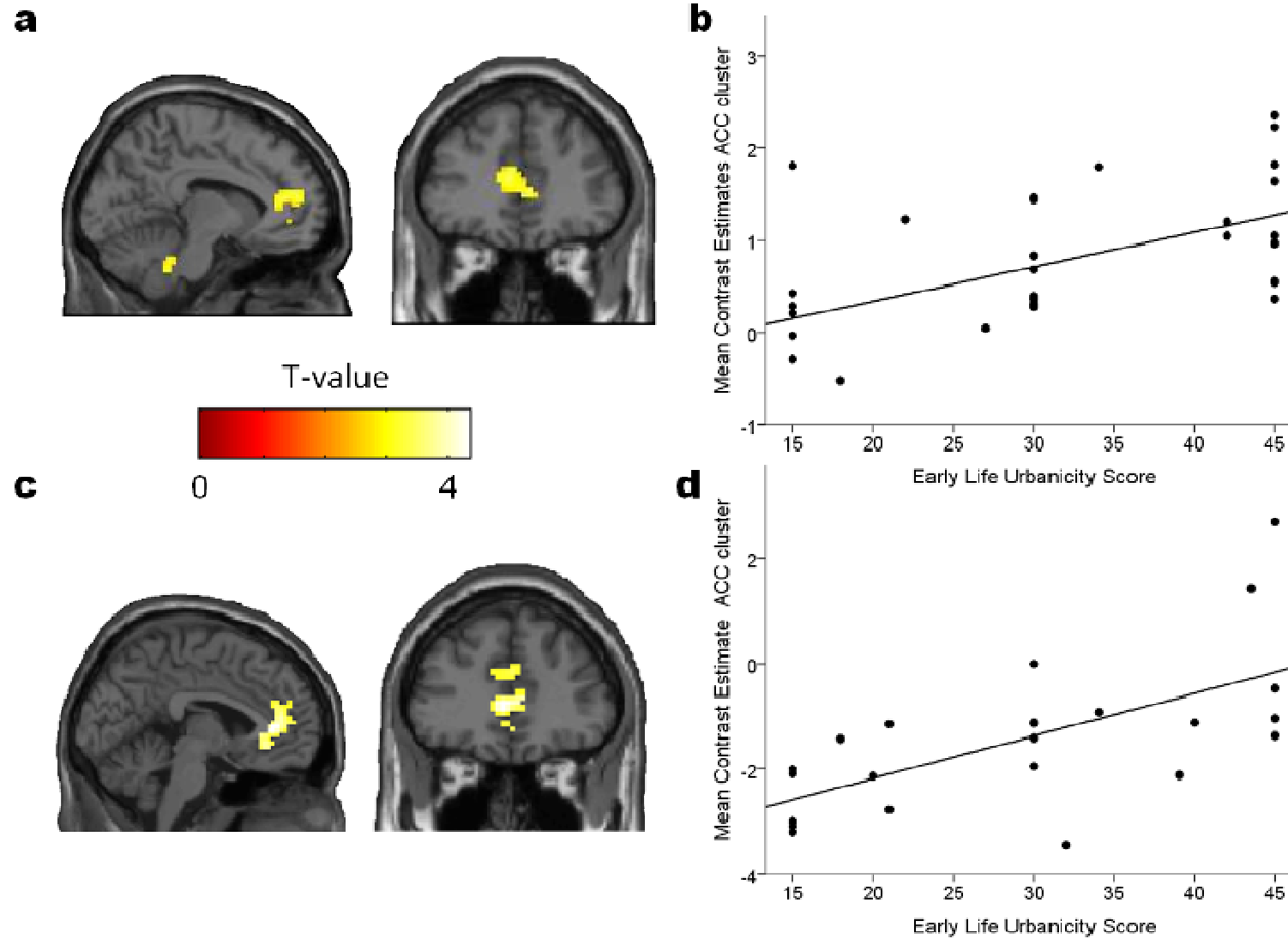


Lederbogen, Kirsch, Haddad et al.,
Nature 2011

Urbanizität und Amygdalaaktivierung

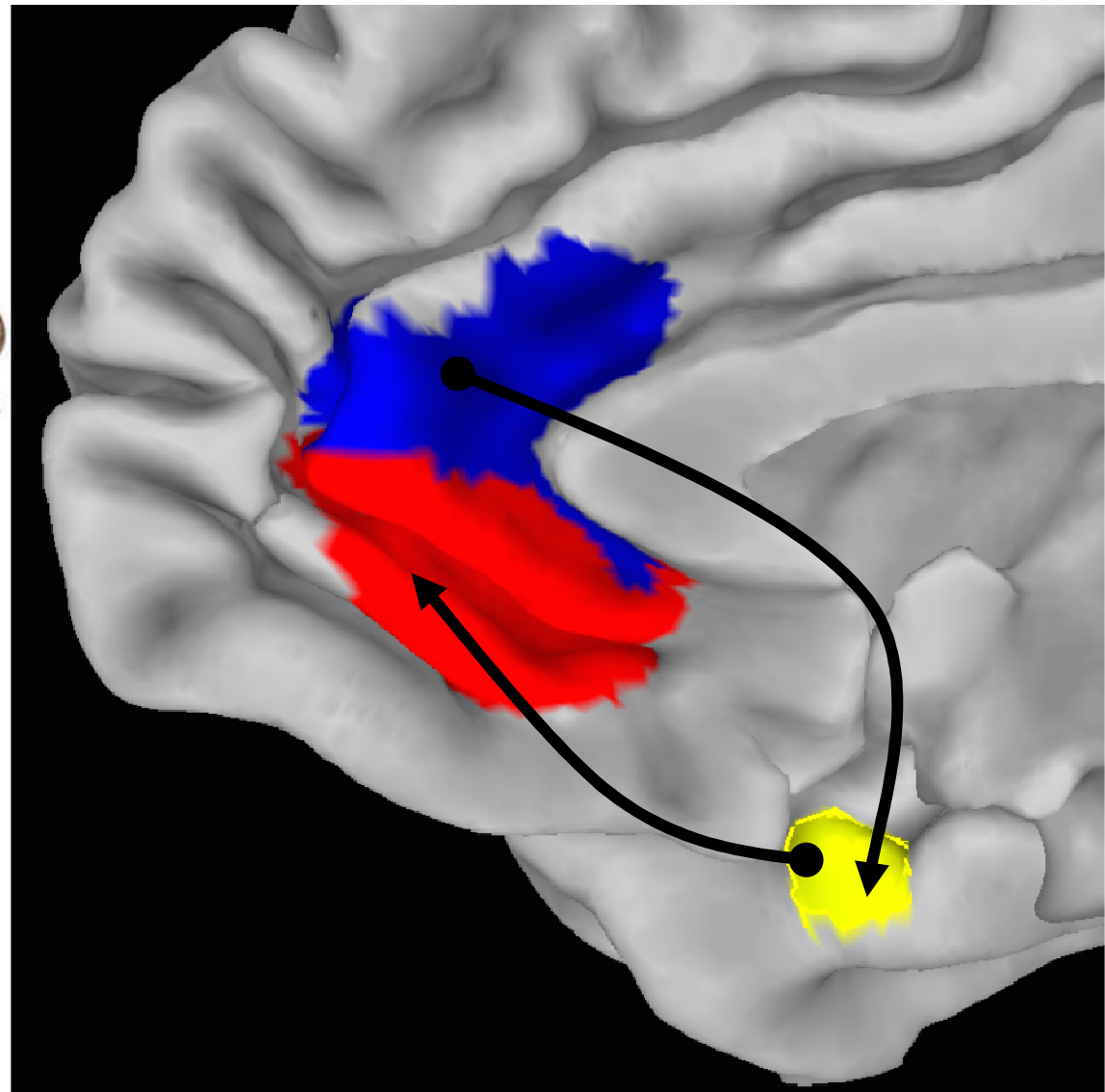
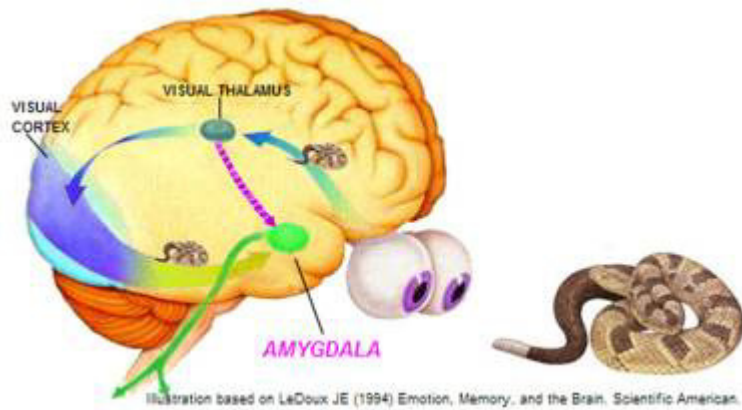


Stadtgeburt und Zingulum



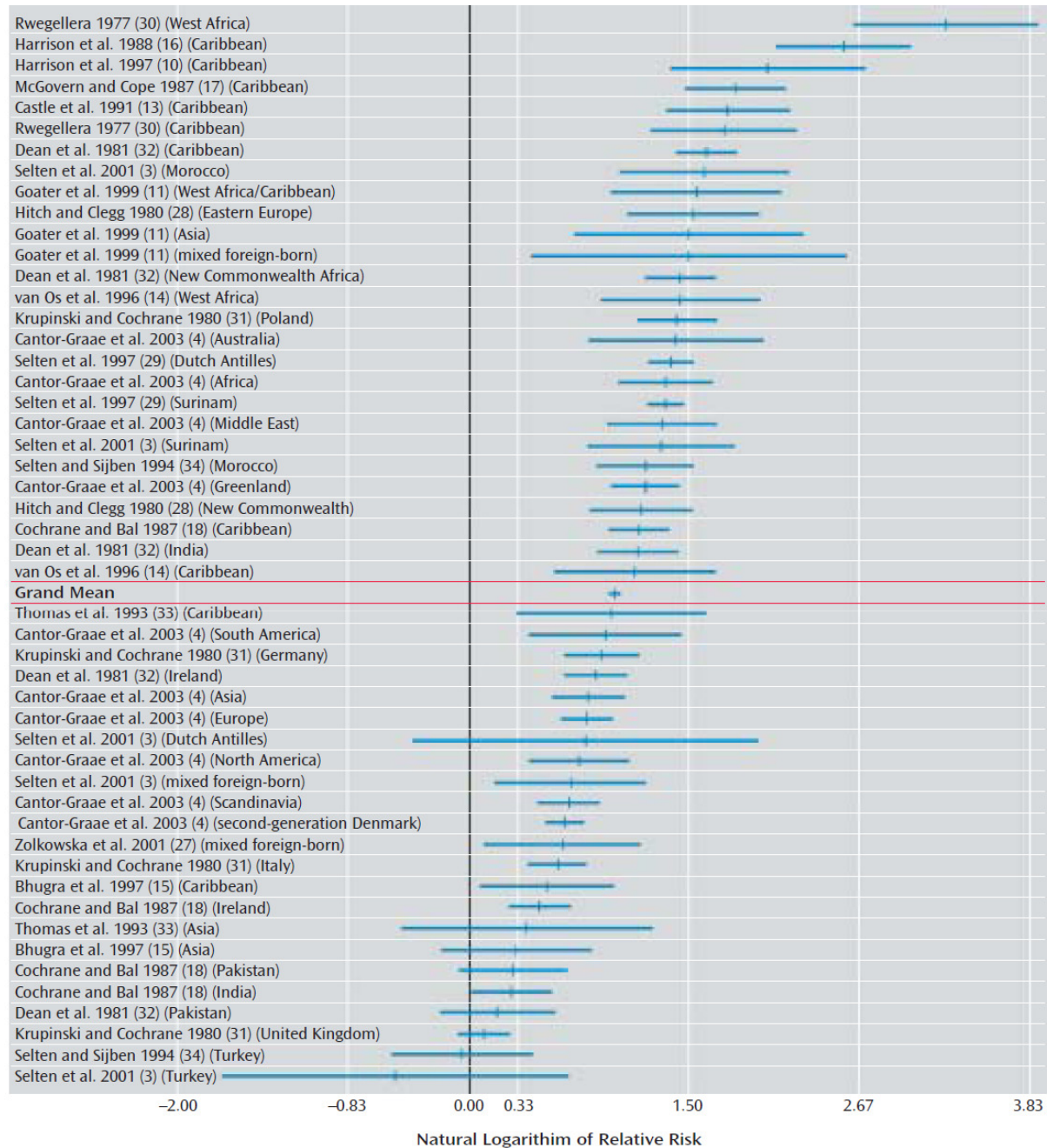
Lederbogen, Kirsch, Haddad et al., **Nature** 2011

Ein Mechanismus für Gen-Umwelt-Interaktionen



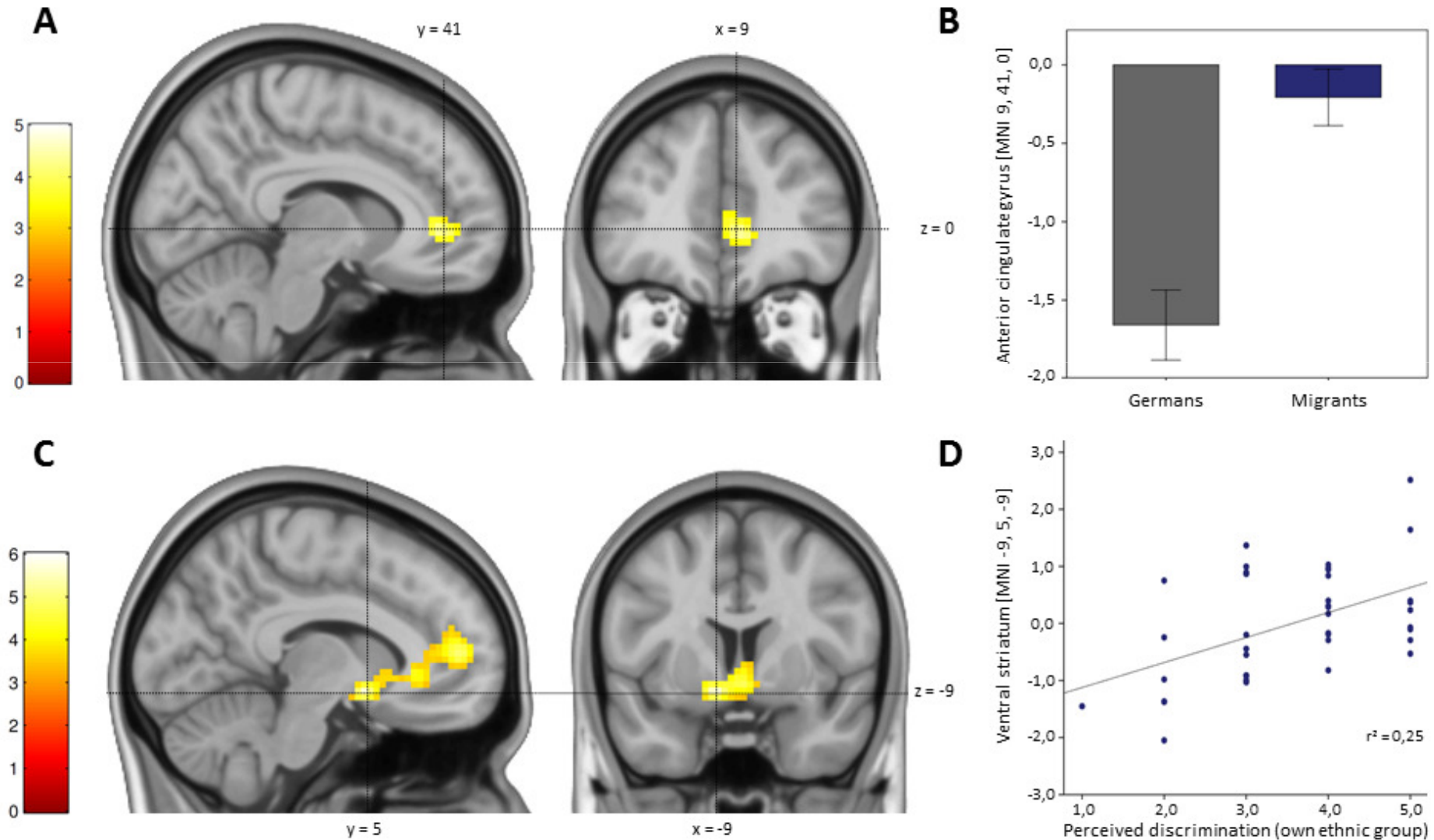
Pezawas*, Meyer-Lindenberg* et al. **Nat Neurosci** 2005,
Pezawas*, Meyer-Lindenberg* et al. **Mol Psychiatry** 2008

Migration und Schizophrenie



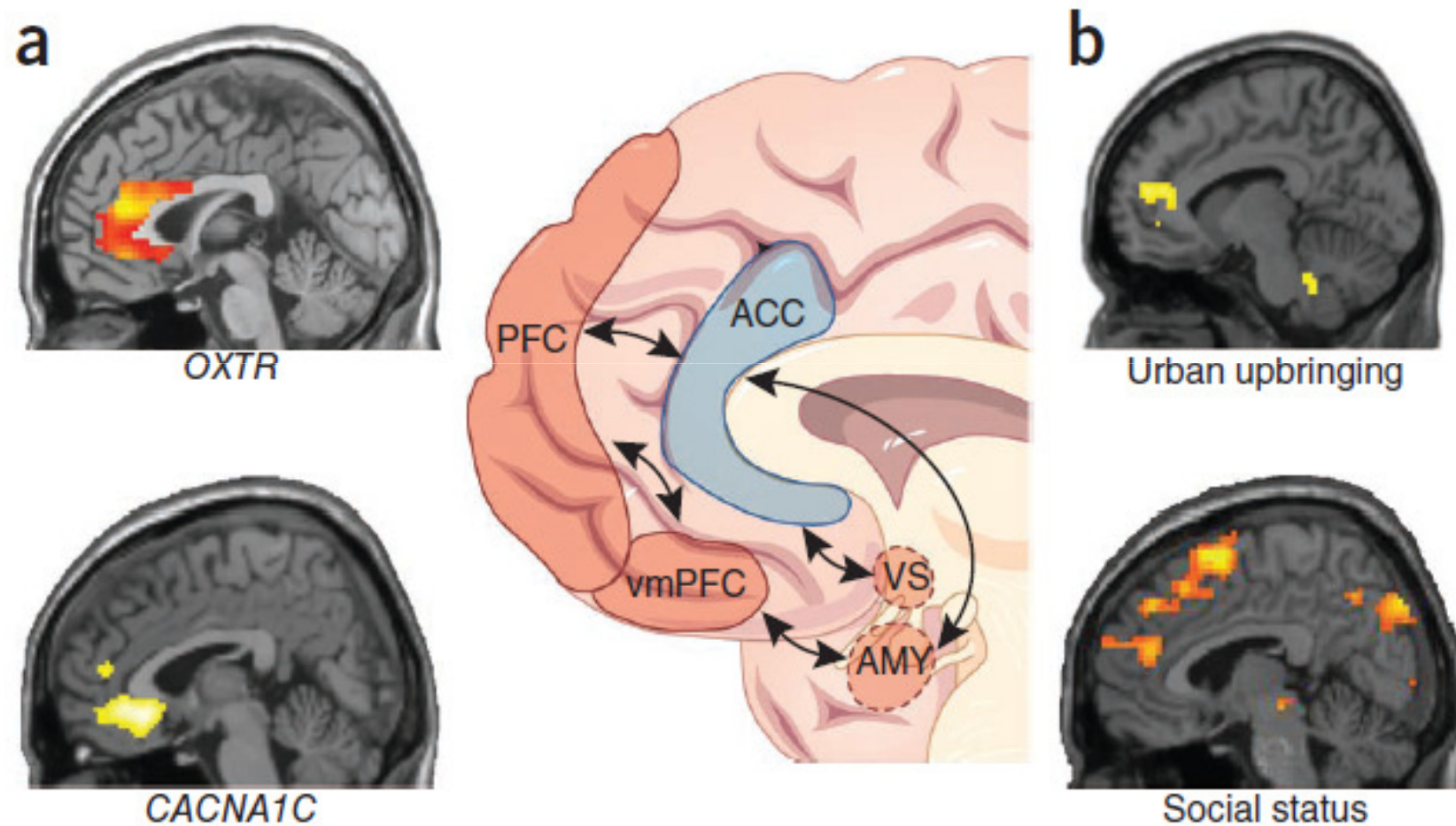
Cantor-Graae and Selten **Am J Psychiat** 2005

Stressverarbeitung bei Migranten

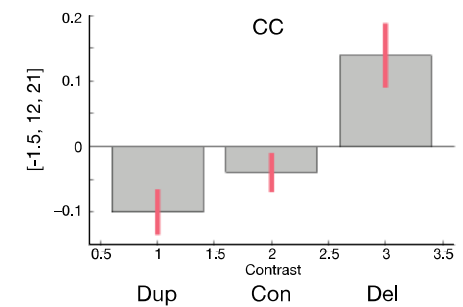
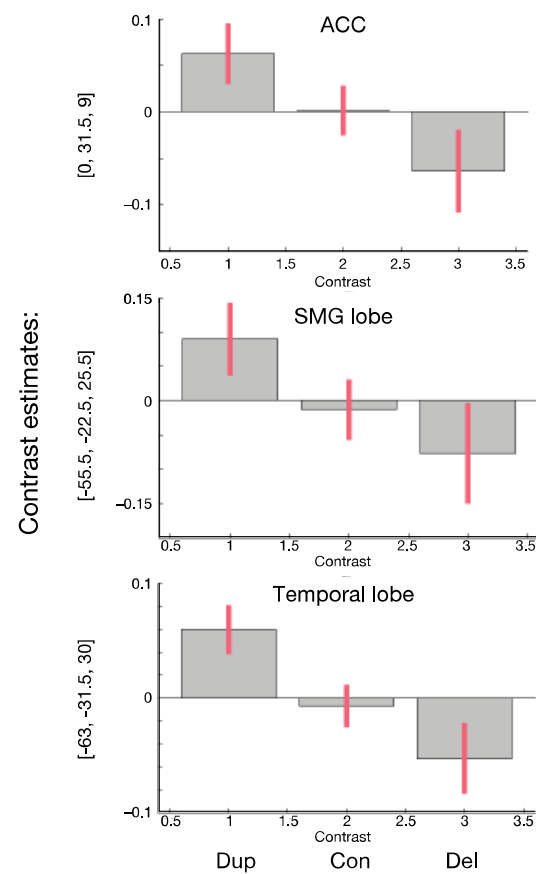
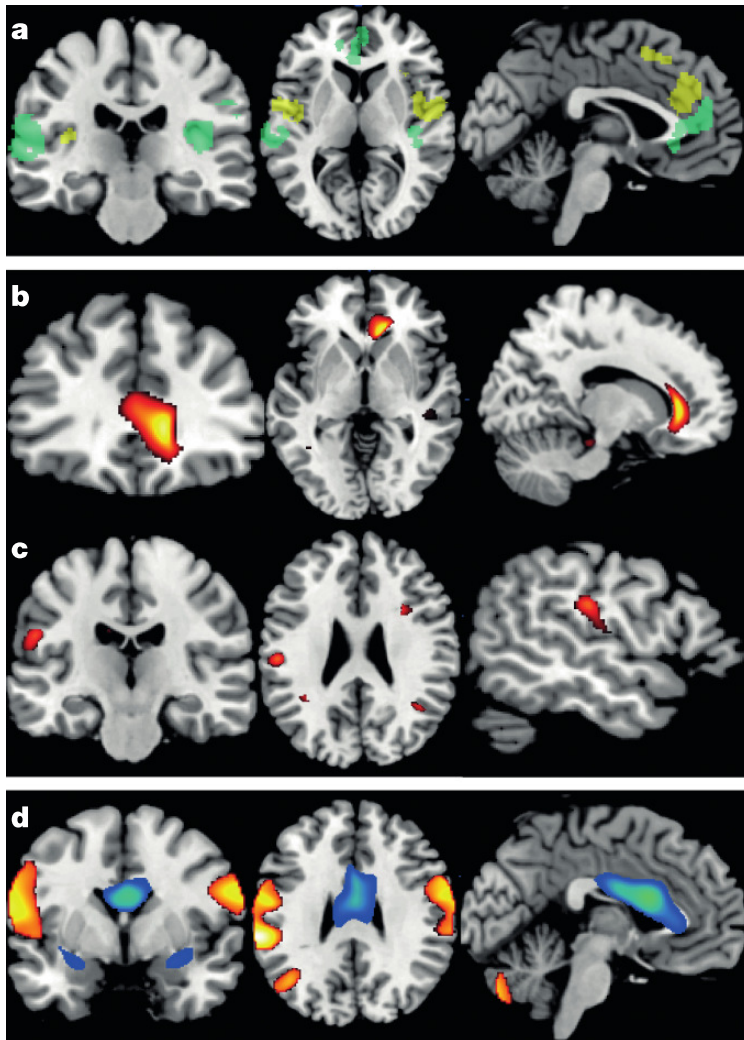


Akdeniz*, Tost* et al., **JAMA Psychiatry** 2014

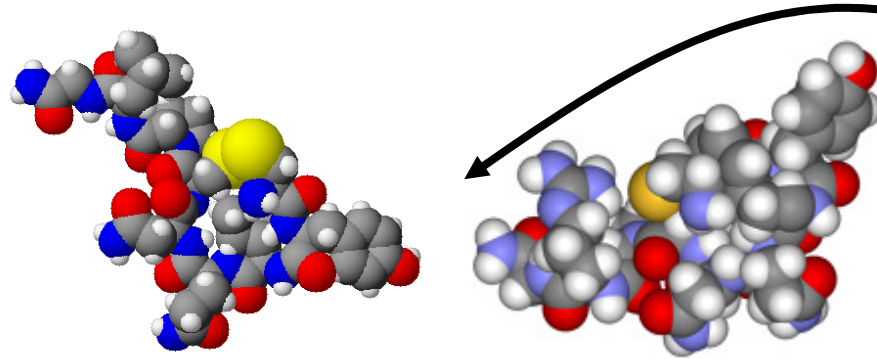
Konvergenz von Umwelt- und genetischen Risiken im perigenualen Zingulum



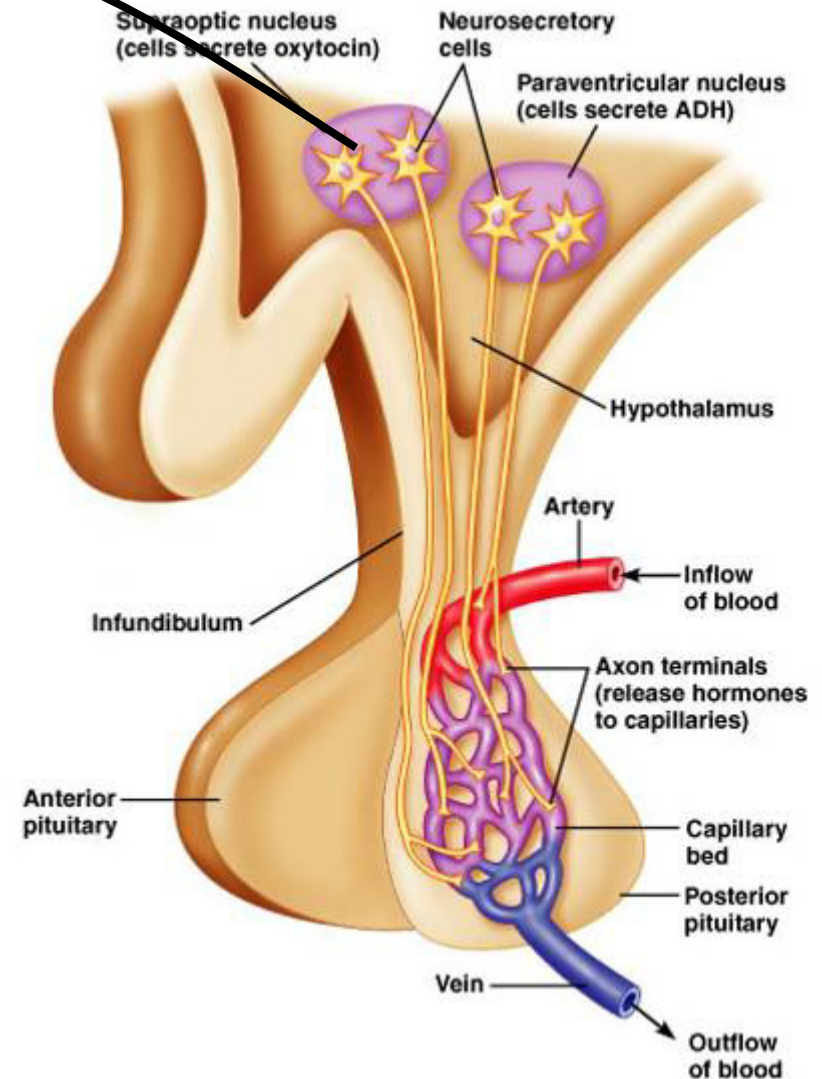
Dose-dependent effects of schizophrenia-related CNV (15q11.2(BP1-BP2)) on brain volume



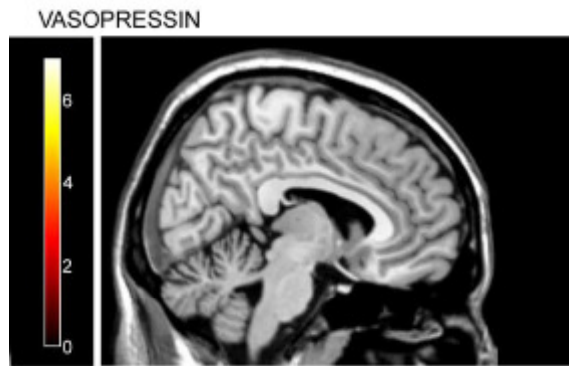
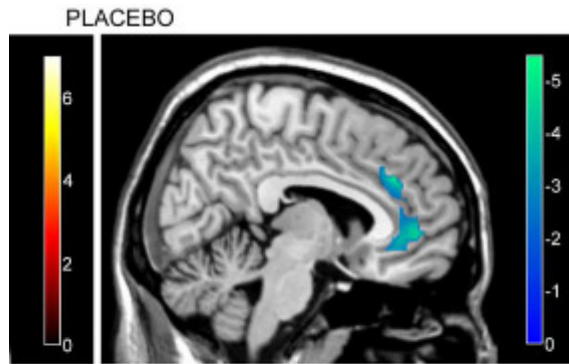
Prosoziale Neuropeptide



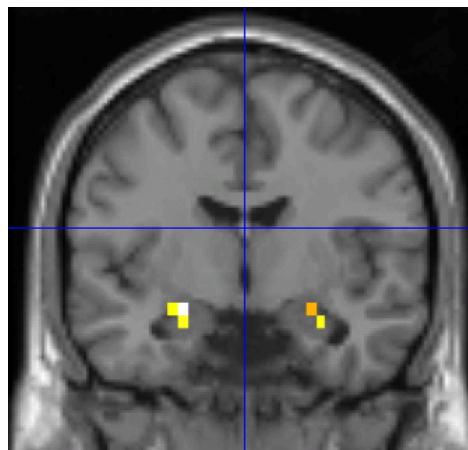
- Molekulare Mediatoren prosozialen Verhaltens bei allen Säugetieren: Mutter-Kind-Bindung, Paarbindung, Vertrauen
- Beim Menschen nach nasaler Gabe zentral wirksam
- Potential für spezifische Synergien mit Psychotherapie



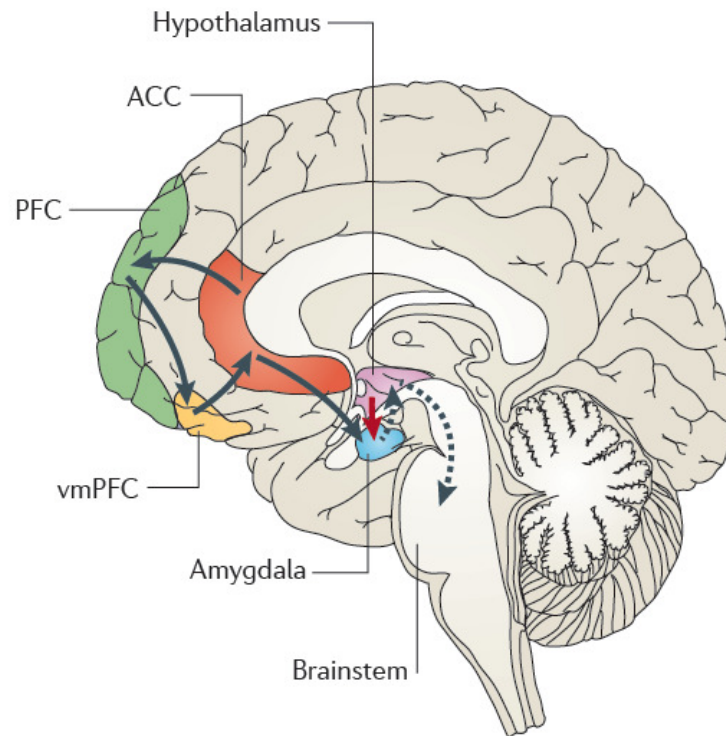
Prosoziale Pharmakotherapie



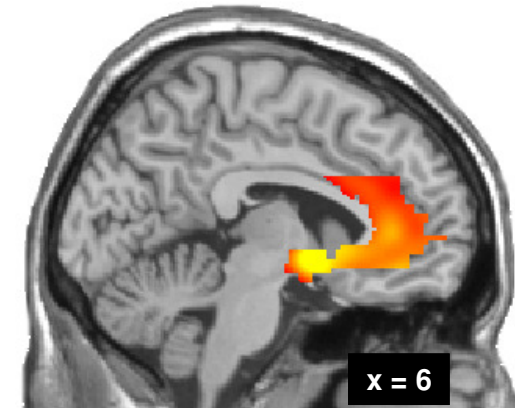
Zink et al., **J Neurosci** 2010



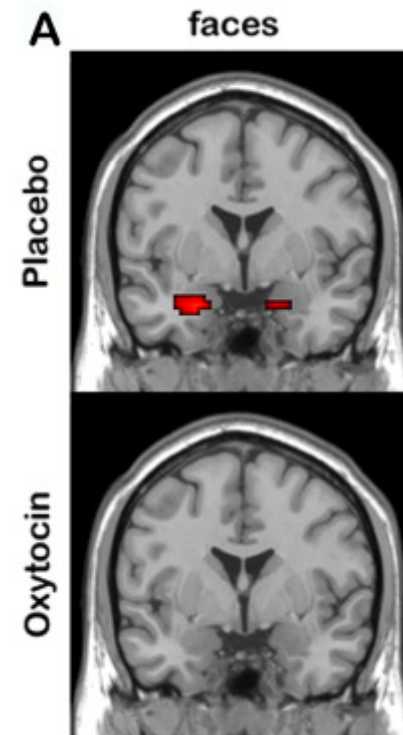
Meyer-Lindenberg et al., **Mol Psychiatry** 2008



Meyer-Lindenberg et al.,
Nat Rev Neurosci 2011

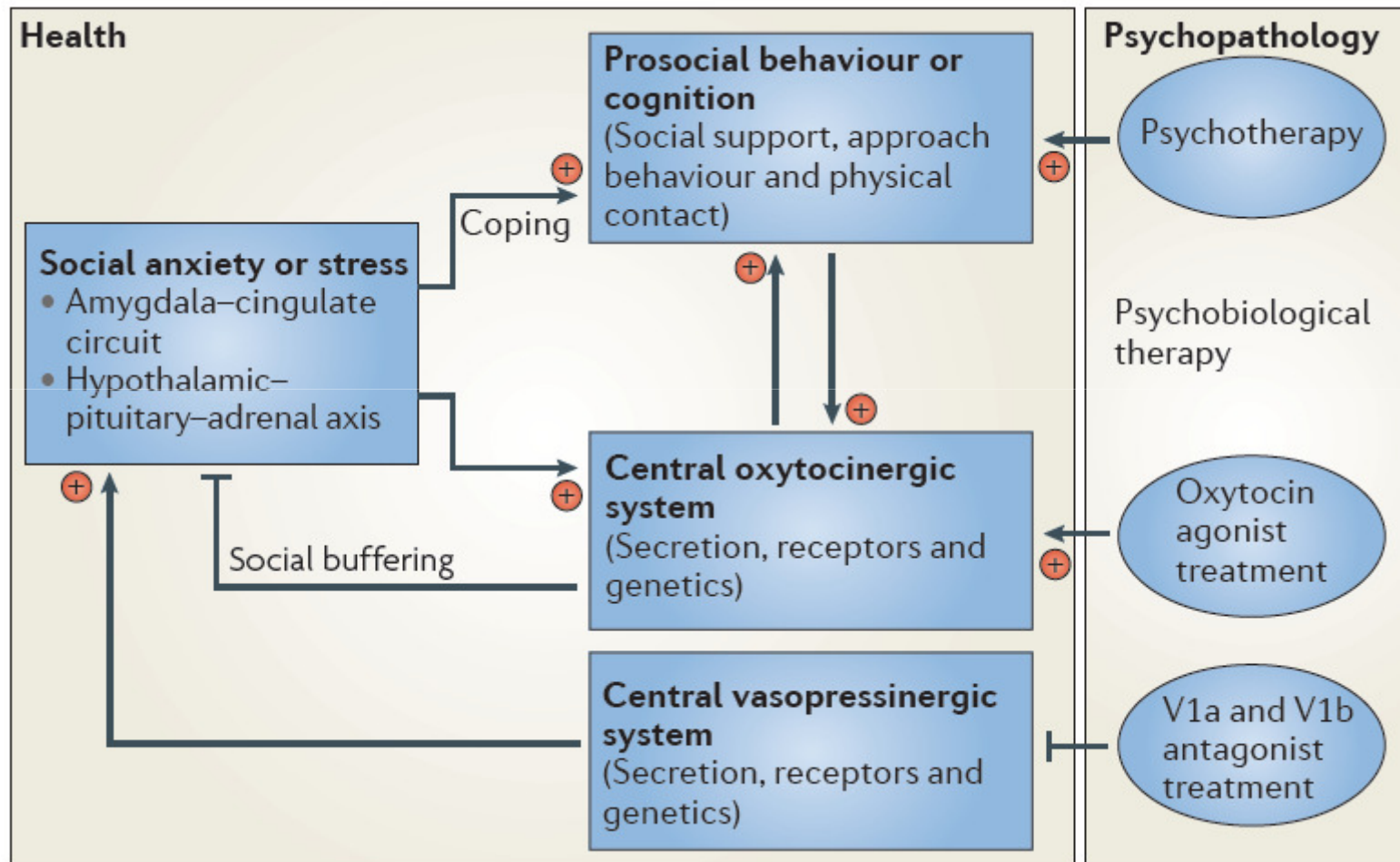


Tost et al. **PNAS** 2010



Kirsch et al.
J Neurosci 2005

Neuropsychotherapie



Danke



Bundesministerium
für Bildung
und Forschung

Deutsche
Forschungsgemeinschaft

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National Institute
of Mental Health



SEVENTH FRAMEWORK
PROGRAMME

NARSAD
The World's Leading Charity Dedicated
to Mental Health Research

- Tost, Zink, Akdeniz, Pezawas, Lederbogen, Haddad, Kirsch, Heinrichs, Walter, Grimm, Akdeniz
- Department of Psychiatry, WG Systems Neuroscience in Psychiatry

