

# Association Between Familial Risk for Psychosis and Problems Measured with the Youth Self-Report at the Age of 15-16 Years

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## OBJECTIVE

- To study if parental history of psychosis is associated with self reported competencies and problems among adolescents.

## METHODS

Members of the Northern Finland 1986 Birth Cohort (N=9,432) filled in the **Youth Self-Report (YSR)** at the age of 15-16 years. 3,404 males and 3,695 females gave adequate information.

The YSR includes eight scales, which measure anxious/depressed, withdrawn/depressed, somatic complaints, social problems, thought problems, attention problems, rule-breaking behaviour, and aggressive behaviour. Scores of the scales were dichotomised based on recommended cut-off point for borderline cases (82<sup>nd</sup> percentile).

Information on family history of psychosis was based on parents' psychotic disorders collected from Finnish Hospital Discharge Register (1972-2000).

## RESULTS

Adolescents with parental history of psychosis scored more commonly over the cut-off for borderline cases in all scales, except in attention problems.

In dichotomised variables, the crude association was statistically significant in **thought problems** (OR 1.50; 95% CI 1.02-2.22) and in **social problems** (OR 1.55; 1.03-2.33). When the association was adjusted, it remained significant only in social problems. Covariates included gender, family type, social class, smoking and drug use. See **Table** for all the results.

In the different combinations of the scales; adolescents who scored high both in thought and social problems had even higher probability for family history of psychosis (OR 2.02; 1.16-3.49).

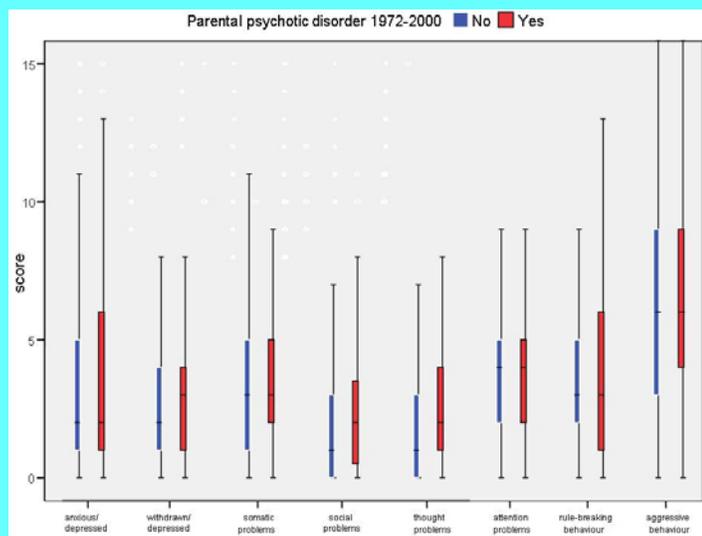
In continuous variables, those with parental history of psychosis had higher mean in **withdrawn/depressed** (t test,  $t=2.04$ ,  $p=0.04$ ) and in **thought problems** ( $t=2.92$ ,  $p=0.02$ ). **Figure** shows box plots for all the YSR scales by parental psychosis.

**Table.** Number and proportion of people with parental history of psychosis among high scorers in different Youth Self-Report (YSR) factors.

	YSR score over appr. 78 <sup>th</sup> percentile				Statistical test (Odds Ratio)	
	No		Yes		Crude OR (95% CI)	Adjusted* OR (95%CI)
	parental psychosis n/N	%	parental psychosis n/N	%		
Anxious/depressed	89/517	1.6	32/1407	2.2	1.39 (0.92-2.09)	1.32 (0.77-2.29)
Withdrawn/depressed	94/5773	1.6	29/1250	2.3	1.44 (0.94-2.19)	1.32 (0.76-2.29)
Somatic complaints	95/5491	1.7	28/1506	1.9	1.08 (0.70-1.65)	0.82 (0.45-1.49)
Social problems	92/5743	1.6	32/1301	2.5	1.55 (1.03-2.33)	1.69 (1.01-2.83)
Thought problems	84/5343	1.6	37/1581	2.3	1.50 (1.02-2.22)	1.34 (0.79-0.27)
Attention problems	100/5594	1.8	24/1484	1.6	0.90 (0.58-1.42)	0.74 (0.40-1.38)
Rule-breaking behavior	92/5587	1.6	32/1441	2.2	1.36 (0.90-2.04)	1.12 (0.61-2.05)
Aggressive behavior	97/5566	1.7	28/1451	1.9	1.11 (0.73-1.70)	0.78 (0.42-1.45)

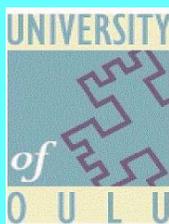
\*Adjusted for gender, family type (intact/nonintact), mother's social class (professional, no/yes), regular smoking (no/yes) and ever tried illicit drugs (no/yes).

**Figure.** Box-plots for different Youth Self-Report (YSR) factors by parental history of psychosis among.



## DISCUSSION

- YSR was able to detect some differences between those with family history of psychosis and those without.
- Differences were not very large, highest odds ratio being for combination of thought and social problems (OR = 2.02).
- Children with family history of psychosis have particularly more commonly thought and social problems.
- These problems may indicate prodromal symptoms of psychosis and these adolescents are most likely in elevated risk to develop psychosis.



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