Supplementary Table 1. Differences between the participants included in the analytic sample and the non-responders of the PREDO cohort that were not included in the analyses.

	Participants (n=2636)	Non-participants (n=2138)	
	Mean (SD)/No. (%)	Mean (SD)/No. (%)	P-value
MATERNAL CHARACTERISTICS			
Age at childbirth, mean (SD), years	31.90 (4.62)	31.00 (5.16)	**<.001**
Unknown, no. (%)		10 (0.5)	
Education level, no. (%)			**<.001**
Primary or secondary	745 (28.3)	820 (38.4)	
Lower tertiary	831 (31.5)	449 (21.0)	
Upper tertiary	1060 (40.2)	531 (24.8)	
Unknown	-	338 (15.8)	
Marital status, no. (%)			**<.001**
Single	50 (1.9)	82 (3.8)	
Married or cohabiting	2582 (98.0)	1988 (93.0)	
Unknown	4 (0.2)	68 (3.2)	
Parity, no. (%)			**<.001**
Primiparous	1102 (41.8)	753 (35.2)	
Multiparous	1534 (58.2)	1385 (64.8)	
Substance use during early pregnancy, no. (%)			**.01**
Yes	544 (20.6)	375 (17.5)	
No	2092 (79.4)	1738 (81.3)	
Unknown	-	25 (1.2)	
Cardio-metabolic pregnancy conditions[a), no. (%)			**.004**
Yes	1092 (41.4)	972 (45.5)	
No	1358 (51.5)	988 (46.2)	
Only before current pregnancy	183 (6.9)	154 (7.2)	
Unknown	3 (0.1)	24 (1.1)	
Any mental disorder[b), no. (%)			
Diagnosed before or during pregnancy (yes)	211 (8.0)	286 (13.4)	**<.001**
No	2425 (92.0)	1832 (85.7)	
Unknown	-	20 (0.9)	
Diagnosed by the late childhood follow-up (yes)	386 (14.6)	475 (22.4)	**<.001**
No	2250 (85.4)	1643 (77.6)	
Unknown	-	20 (0.9)	
Depressive symptoms (CES-D), mean (SD)	11.39 (6.36)	11.72 (6.53)	.21
Below clinically relevant symptoms (<16), no. (%)	2073 (78.6)	596 (27.9)	.75
Clinically relevant symptoms (≥16), no. (%)	563 (21.4)	167 (7.8)	
Unknown, no. (%)	-	1375 (64.3)	

Supplementary Table 1 (continued)

Positive mental health during pregnancy, mean (SD)			
Positive affect (PANAS)	30.15 (6.74)	30.76 (6.84)	**.03**
Unknown, no. (%)	-	1374 (64.3)	
Curiosity (STAI)	31.46 (4.84)	31.23 (4.98)	.24
Unknown, no. (%)	-	1374 (64.3)	
Social support (VAS)	44.37 (11.03)	43.68 (11.83)	.15
Unknown, no. (%)	-	1372 (64.2)	
CHILD CHARACTERISTICS			
Sex, no. (%)			.07
Girl	1291 (49.0)	982 (45.9)	
Boy	1345 (51.0)	1139 (53.3)	
Unknown	-	17 (0.8)	
Birth weight, mean (SD), grams	3522.95 (514.00)	3543.80 (534.88)	.17
Unknown, no. (%)	7 (0.3)	26 (0.5)	
Gestational age at birth, mean (SD), weeks	39.91 (1.55)	39.86 (1.67)	.31
Unknown, no. (%)	-	4 (0.2)	

P-value for statistical difference between participants and non-participants when including participants with available data. SD=Standard deviation. CES-D=Center for Epidemiologic Studies Depression Scale. PANAS=Positive and Negative Affect Schedule. STAI=Spielberger State Anxiety Inventory. VAS=Visual Analogue Scale. CBCL=Child Behavior Checklist. a) Cardio-metabolic pregnancy conditions included early pregnancy body mass index [BMI]≥25kg/m2, chronic hypertension, preeclampsia, gestational hypertension or unspecified hypertension in current pregnancy [ICD-10: I1, 010-011, O13-O16], and/or type 1, type 2 or gestational diabetes [ICD-10: E08-E14, O24]. b) All mental and behavioral disorder diagnoses classified using the International Classification of Diseases, 8th (ICD-8; codes 290-315) and 9th (ICD-9; codes 290-319) Revisions and the International Statistical Classification of Diseases and Related Health Problems, 10th (ICD-10) Revision (codes F00-F99).

Supplementary Table 2. Associations between the covariates and total psychiatric problems among children in early childhood and in late childhood.

	Total problems					
	Early childhood			Late childhood		
	B	95%CI	p	B	95%CI	p
MATERNAL CHARACTERISTICS						
Age at childbirth (years)	**-0.23**	**-0.31, -0.15**	**<.001**	**-0.17**	**-0.27, -0.08**	**<.001**
Education level						
Upper tertiary	[ref]			[ref]		
Lower tertiary	**1.23**	**0.34, 2.12**	**.01**	**2.54**	**1.51, 3.57**	**<.001**
Primary or secondary	**1.50**	**0.59, 2.42**	**.001**	**3.53**	**2.43, 4.64**	**<.001**
Marital status						
Married/cohabiting	[ref]			[ref]		
Single parent	0.28	-2.51, 3.07	.84	**4.76**	**1.41, 8.10**	**.01**
Parity						
Primiparity	[ref]			[ref]		
Multiparity	**-3.18**	**-3.93, -2.44**	**<.001**	**-2.68**	**-3.58, -1.77**	**<.001**
Cardio-metabolic pregnancy conditions[a]						
No	[ref]			[ref]		
Yes	0.40	-0.38, 1.19	.32	0.84	-0.09, 1.77	.08
Other	-0.35	-1.82, 1.12	.64	-0.40	-2.23, 1.43	.67
Substance use during early pregnancy						
No	[ref]			[ref]		
Yes	0.92	-0.01, 1.85	.05	**1.11**	**0.002, 2.23**	**.05**
CHILD CHARACTERISTICS						
Sex						
Girl	[ref]			[ref]		
Boy	**1.39**	**0.64, 2.14**	**<.001**	**2.40**	**1.51, 3.29**	**<.001**
Age at follow-up	**-0.59**	**-1.12, -0.06**	**.03**	-0.11	-0.67, 0.45	.69
Birth weight (grams)	**-0.001**	**-0.002, 0.000**	**.001**	-0.001	-0.001, 0.000	.20
Gestational age at birth (weeks)	-0.20	-0.44, 0.04	.11	0.05	-0.25, 0.34	.76

CI=Confidence Interval. a) Cardio-metabolic pregnancy conditions included early pregnancy body mass index [BMI]≥25kg/m2, chronic hypertension, preeclampsia, gestational hypertension or unspecified hypertension in current pregnancy [ICD-10: I1, 010-011, O13-O16], and/or type 1, type 2 or gestational diabetes [ICD-10: E08-E14, O24]. b) All mental and behavioral disorder diagnoses classified using the International Classification of Diseases, 8th (ICD-8; codes 290-315) and 9th (ICD-9; codes 290-319) Revisions and the International Statistical Classification of Diseases and Related Health Problems, 10th (ICD-10) Revision (codes F00-F99).

Supplementary Table 3. Associations between the indices of negative maternal mental health and total psychiatric problems among children in early childhood and in late childhood.

	Total problems					
	Early childhood			Late childhood		
	B	95%CI	p	B	95%CI	p
Depressive symptoms during pregnancy (continuous CES-D score)	**2.87**	**2.51, 3.22**	**<.001**	**3.35**	**2.93, 3.78**	**<.001**
Mental disorder[a)] before or during pregnancy						
No	[ref]			[ref]		
Yes	1.18	-0.18, 2.55	.09	**3.25**	**1.58, 4.92**	**<.001**
Clinically relevant depressive symptoms during pregnancy and/or mental disorder[a)] before or during pregnancy						
No	[ref]			[ref]		
Yes	**4.23**	**3.39, 5.06**	**<.001**	**4.87**	**3.86, 5.88**	**<.001**
Clinically relevant depressive symptoms during pregnancy and/or mental disorder[a)] by early childhood/late childhood follow-up						
No	[ref]			[ref]		
Yes	**4.14**	**3.32, 4.96**	**<.001**	**4.79**	**3.83, 5.74**	**<.001**

CI=Confidence Interval. CES-D=Center for Epidemiologic Studies Depression Scale. a) All mental and behavioral disorder diagnoses classified using the International Classification of Diseases, 8th (ICD-8; codes 290-315) and 9th (ICD-9; codes 290-319) Revisions and the International Statistical Classification of Diseases and Related Health Problems, 10th (ICD-10) Revision (codes F00-F99).

Supplementary Table 4. Standardized mean scores (SD units), standard deviations and group differences of positive affect, curiosity, social support, and their composite score in the groups of women with and without clinically relevant depressive symptoms during pregnancy and with and without mental and behavioral disorders diagnosed before the child's birth.

| | Maternal clinically relevant depressive symptoms during pregnancy | | | | | | Maternal mental and behavioral disorders diagnosed before the child's birth | | | | | |
| | CES-D<16 | | CES-D≥16 | | Difference between groups | | No diagnoses | | Has diagnoses | | Difference between groups | |
	Mean	SD	Mean	SD	Mean difference	p	Mean	SD	Mean	SD	Mean difference	p
Positive mental health composite score	0.28	0.85	-1.05	0.78	1.33	<.001	0.04	0.99	-0.44	1.05	0.47	<.001
Positive affect (PANAS)	0.22	0.94	-0.81	0.79	1.03	<.001	0.03	0.99	-0.33	1.01	0.36	<.001
Curiosity (STAI)	0.32	0.79	-1.17	0.80	1.49	<.001	0.05	0.98	-0.52	1.10	0.57	<.001
Social support (VAS)	0.14	0.96	-0.53	0.97	0.68	<.001	0.02	0.99	-0.19	1.06	0.20	.004

SD=Standard deviation. T=T test for mean difference. P value refers to the significance of the difference between group means. PANAS=Positive and Negative Affect Schedule. STAI=Spielberger State Anxiety Inventory. VAS=Visual Analogue Scale.

Supplementary Table 5. Full model of the associations of positive maternal mental health and the covariates with total psychiatric problems among children in early childhood and in late childhood in Model 2.

	Total problems					
	Early childhood			Late childhood		
	B	95%CI	p	B	95%CI	p
Positive maternal mental health composite score	**-1.37**	**-1.79, -0.95**	**<.001**	**-1.75**	**-2.24, -1.26**	**<.001**
Maternal age at childbirth (years)	**-0.11**	**-0.19, -0.03**	**.01**	-0.05	-0.15, 0.05	.33
Education level						
Upper tertiary	[ref]			[ref]		
Lower tertiary	0.55	-0.32, 1.42	.21	**2.04**	**1.03, 3.05**	**<.001**
Primary or secondary	**0.98**	**0.09, 1.87**	**.03**	**3.13**	**2.05, 4.21**	**<.001**
Marital status						
Married/cohabiting	[ref]			[ref]		
Single parent	2.02	-0.68, 4.71	.14	-1.84	-5.07, 1.38	.26
Parity						
Primiparity	[ref]			[ref]		
Multiparity	**3.57**	**2.78, 4.36**	**<.001**	**3.35**	**2.40, 4.30**	**<.001**
Cardio-metabolic pregnancy conditions[a]						
No	[ref]			[ref]		
Yes	0.28	-0.49, 1.04	.48	0.46	-0.45, 1.37	.32
Other	0.18	-1.25, 1.60	.81	-0.10	-1.85, 1.66	.92
Substance use during early pregnancy						
No	[ref]			[ref]		
Yes	**0.97**	**0.07, 1.86**	**.04**	**1.19**	**0.12, 2.26**	**.03**
Clinically relevant depressive symptoms during pregnancy and/or mental disorder [b] by early childhood/late childhood follow-up						
No	[ref]			[ref]		
Yes	**2.50**	**1.57, 3.43**	**<.001**	**2.78**	**1.72, 3.83**	**<.001**
Child sex						
Girl	[ref]			[ref]		
Boy	**1.49**	**0.77, 2.22**	**<.001**	**2.49**	**1.63, 3.35**	**<.001**
Child age at follow-up	**-0.77**	**-1.28, -0.26**	**.003**	-0.37	-0.91, 0.17	.18
Child birth weight (grams)	-0.001	-0.001, 0.00	.25	0.00	-0.001, 0.001	.47
Child gestational age at birth (weeks)	-0.03	-0.31, 0.25	.85	0.20	-0.14, 0.54	.26

CI=Confidence Interval. a) Cardio-metabolic pregnancy conditions included early pregnancy body mass index [BMI]≥25kg/m2, chronic hypertension, preeclampsia, gestational hypertension or unspecified hypertension in current pregnancy [ICD-10: I1, 010-011, O13-O16], and/or type 1, type 2 or gestational diabetes [ICD-10: E08-E14, O24]. b) All mental and behavioral disorder diagnoses classified using the International Classification of Diseases, 8th (ICD-8; codes 290-315) and 9th (ICD-9; codes 290-319) Revisions and the International Statistical Classification of Diseases and Related Health Problems, 10th (ICD-10) Revision (codes F00-F99).

Supplementary Table 6. Associations between positive maternal mental health and internalizing and externalizing problems among children in early childhood and in late childhood.

	Internalizing problems						Externalizing problems					
	Early childhood (n=2296)			Late childhood (n=2001)			Early childhood (n=2296)			Late childhood (n=2001)		
	B	95%CI	p	B	95%CI	p	B	95%CI	p	B	95%CI	p
Positive maternal mental health composite score												
Model 1	-1.39	-1.77, -1.01	<.001	-1.78	-2.21, -1.36	<.001	-1.37	-1.73, -1.01	<.001	-1.57	-2.00, -1.15	<.001
Model 2	-1.27	-1.70, -0.83	<.001	-1.55	-2.03, -1.08	<.001	-1.08	-1.50, -0.66	<.001	-1.49	-1.97, -1.00	<.001

CI=Confidence Interval.

Model 1 is adjusted for child sex and age at assesment of psychiatric problems.

Model 2 is adjusted for covariates of Model 1 and child's birth weight and gestational age, maternal age, marital status, education level, parity, substance use during pregnancy, cardio-metabolic pregnancy conditions, and negative mental health, i.e., clinically relevant depressive symptoms (CES-D) during pregnancy and/or mental disorders by the child's early childhood and late childhood follow-ups.

Supplementary Table 7. Three-way interactions between positive maternal mental health composite score, negative maternal mental health, and child age when predicting total psychiatric problems in children.

	Total problems		
	B	**95%CI**	**p**
Positive maternal mental health x Continuous CES-D score x Child age	**-0.08**	**-0.14, -0.02**	**.008**
Positive maternal mental health x Maternal mental disorders before or during pregnancy x Child age	0.07	-0.20, 0.34	.61
Positive maternal mental health x Maternal clinically relevant depressive symptoms and/or mental disorders before or during pregnancy x Child age	-0.07	-0.27, 0.12	.46

CI=Confidence Interval. CES-D=Center for Epidemiologic Studies Depression Scale.

Supplementary table 8. Interactions between positive maternal mental health and child sex when predicting total, internalizing and externalizing problems at the two follow-ups, and the main effects of positive maternal mental health on child psychiatric problems separately for boys and for girls.
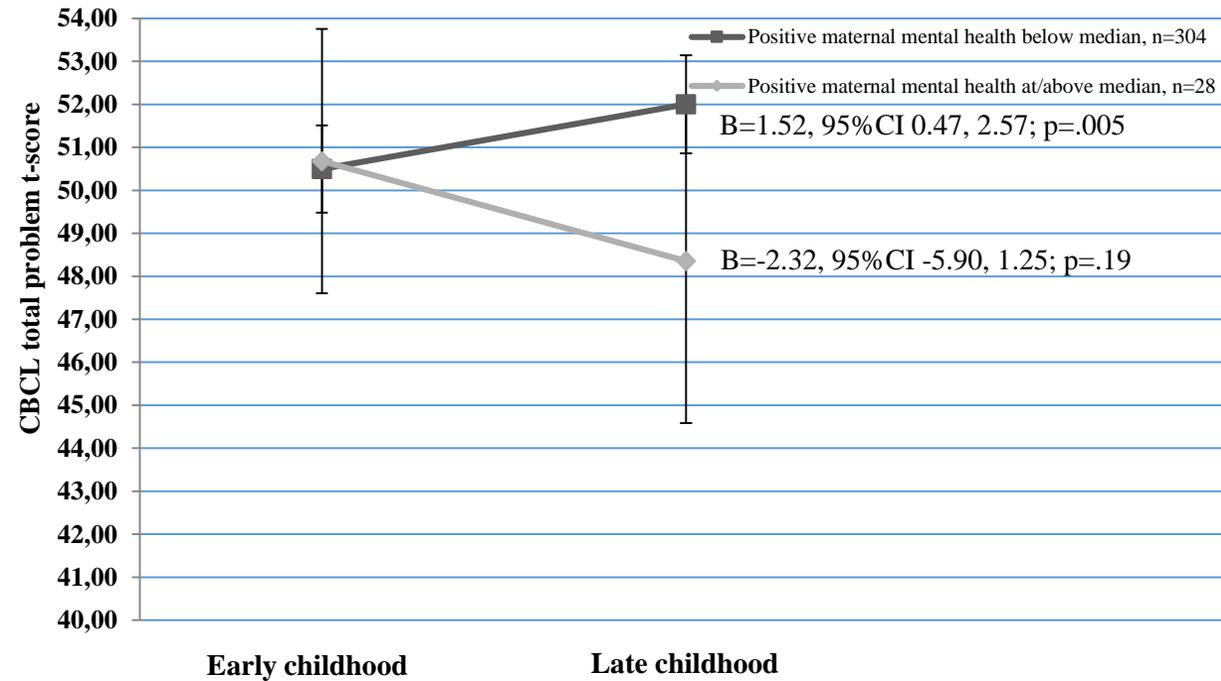
	Total problems						Internalizing problems						Externalizing problems					
	Early childhood (n=2296)			Late childhood (n=2001)			Early childhood (n=2296)			Late childhood (n=2001)			Early childhood (n=2296)			Late childhood (n=2001)		
	B	95%CI	p	B	95%CI	p	B	95%CI	p	B	95%CI	p	B	95%CI	p	B	95%CI	p
Positive maternal mental health composite score*child sex	0.09	-0.65, 0.82	.81	0.32	-0.56, 1.20	.48	-0.07	-0.84, 0.69	.85	0.08	-0.76, 0.92	.85	0.53	-0.19, 1.26	.15	0.32	-0.53, 1.17	.46
Main effects of positive maternal mental health composite score																		
Boys	**-1.65**	**-2.17, -1.13**	**<.001**	**-2.17**	**-2.81, -1.54**	**<.001**	**-1.35**	**-1.88, -0.83**	**<.001**	**-1.82**	**-2.41, -1.24**	**<.001**	**-1.62**	**-2.14, -1.10**	**<.001**	**-1.72**	**-2.36, -1.08**	**<.001**
Girls	**-1.56**	**-2.08, -1.04**	**<.001**	**-1.86**	**-2.46, -1.26**	**<.001**	**-1.43**	**-1.98, -0.87**	**<.001**	**-1.74**	**-2.35, -1.14**	**<.001**	**-1.08**	**-1.59, -0.57**	**<.001**	**-1.40**	**-1.95, -0.85**	**<.001**

CI = Confidence Interval.

Supplementary Figure 1. Change in total psychiatric problems t-scores from early childhood to late childhood among children of mothers with low (below median) and high (at or above median) levels of positive mental health composite score during pregnancy, in the subgroups of mothers with/without clinically relevant depressive symptoms during pregnancy (Panels A-B), in the subgroups of mothers with/without mental disorders before or during pregnancy (Panels C-D), and in the subgroups of mothers with/without clinically relevant depressive symptoms and/or mental disorders before or during pregnancy (Panels E-F). Analyses are adjusted for child's sex, and conducted among mother-child-dyads with psychiatric problems data available at both follow-ups (n=1661).
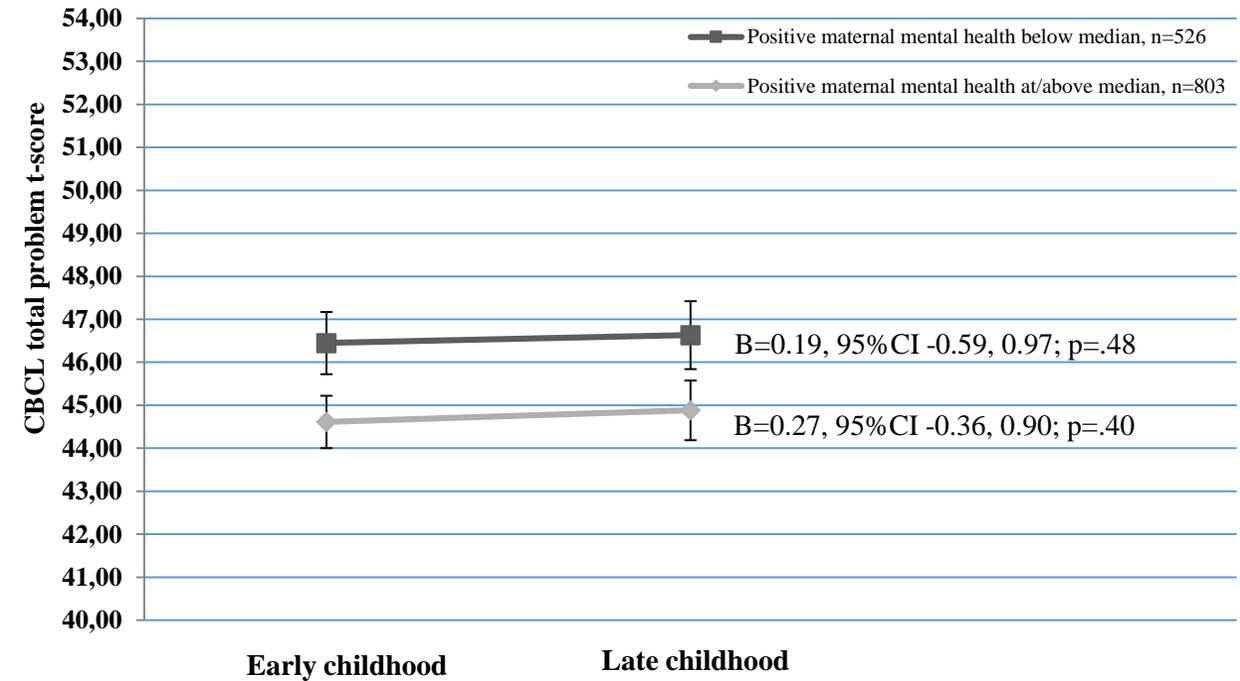
Panel A: Mothers with clinically relevant depressive symptoms during pregnancy, n=332

Interaction *positive maternal mental health x child age*: **B=-0.30, 95%CI -0.51, -0.08; p=.006**
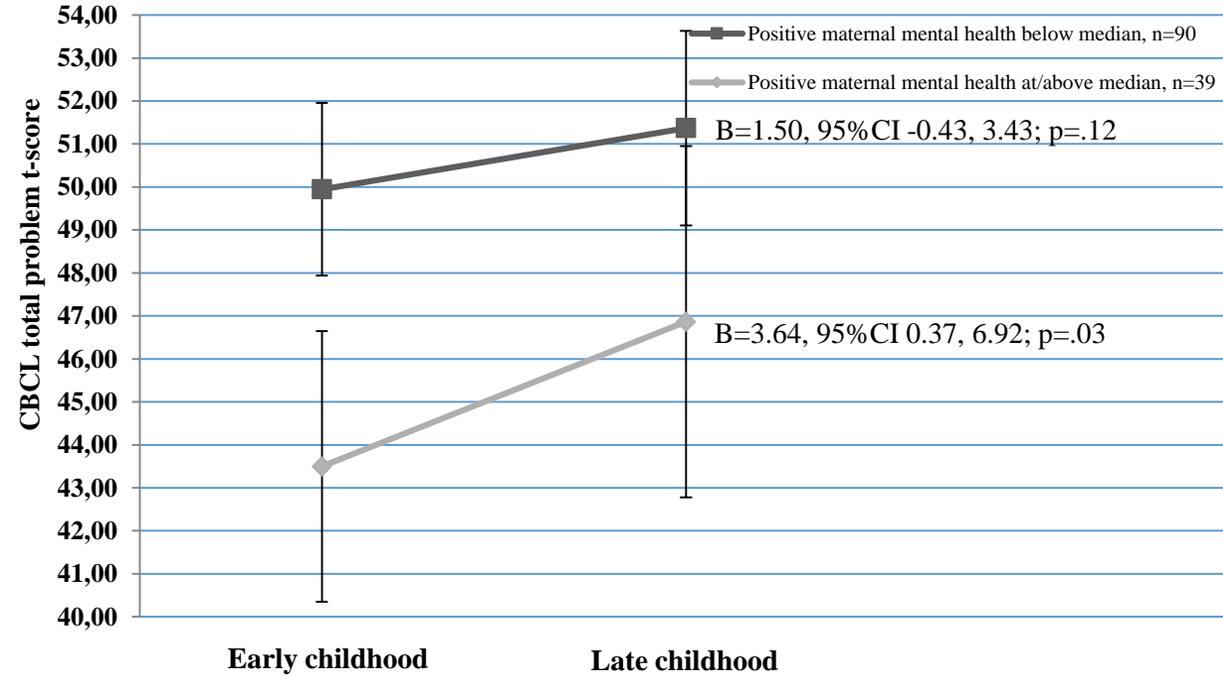
Panel B: Mothers without clinically relevant depressive symptoms during pregnancy, n=1329

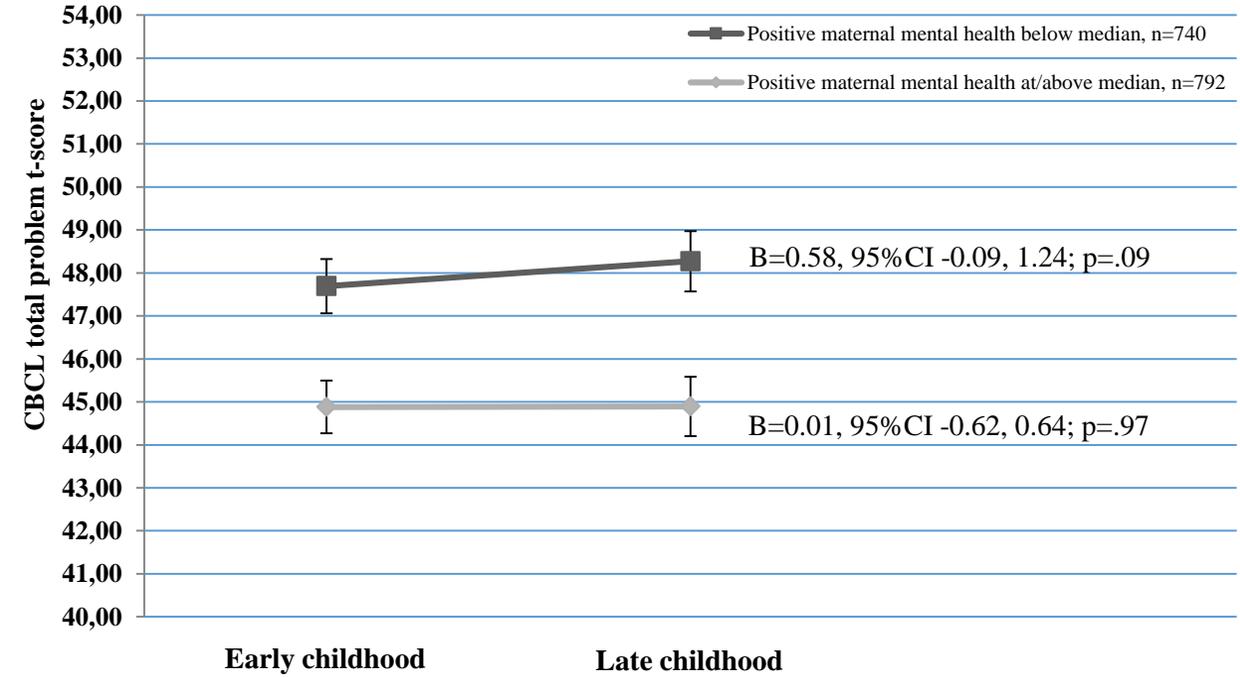Interaction *positive maternal mental health x child age*: B=-0.04, 95%CI -0.13, 0.06; p=.47

Panel C: Mothers with a mental disorder before/during pregnancy, n=129

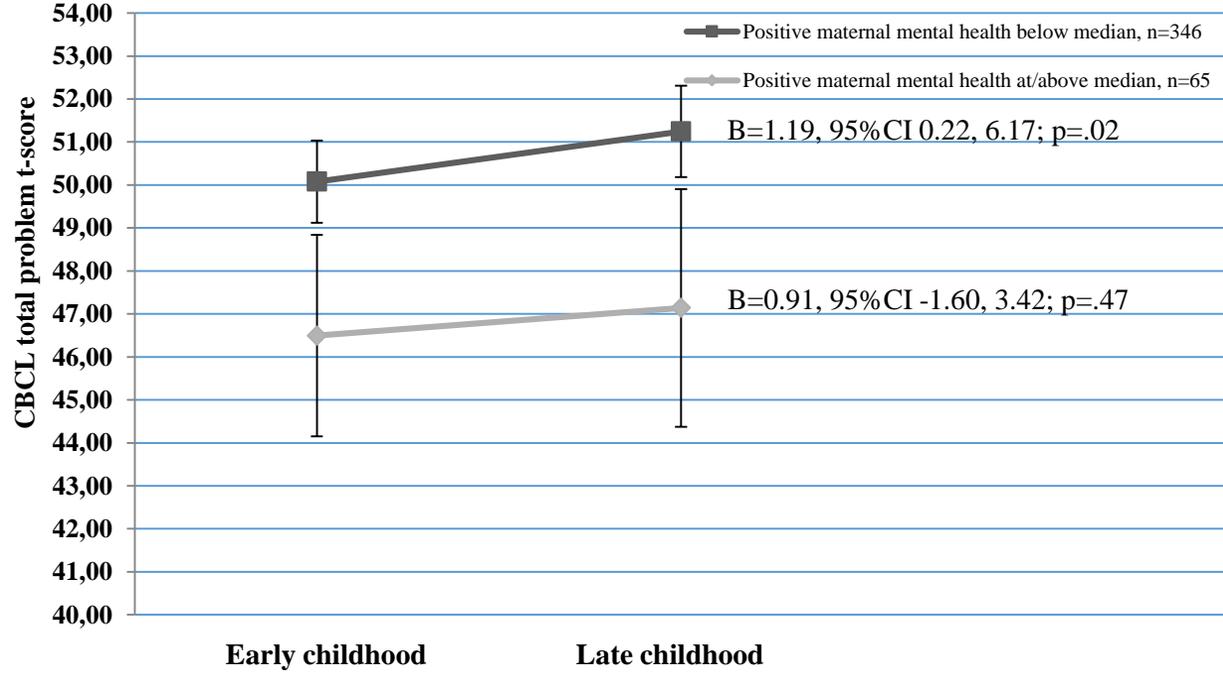Interaction *positive maternal mental health x child age*: B=-0.03, 95%CI -0.29, 0.24; p=.85

Panel D: Mothers with no mental disorders before/during pregnancy, n=1532

Interaction *positive maternal mental health x child age*: B=-0.09, 95%CI -0.17, 0.02; p=.02

Panel E: Mothers with clinically relevant depressive symptoms and/or mental disorders before or during pregnancy, n=411

Interaction *positive maternal mental health x child age*: B=-0.13, 95%CI -0.30, 0.04; p=.13

Positive maternal mental health below median, n=346
Positive maternal mental health at/above median, n=65

B=1.19, 95%CI 0.22, 6.17; p=.02

B=0.91, 95%CI -1.60, 3.42; p=.47

CBCL total problem t-score

Early childhood   Late childhood

Panel F: Mothers without clinically relevant depressive symptoms or mental disorders before or during pregnancy, n=1250

Interaction *positive maternal mental health x child age*: B=-0.06, 95%CI -0.16, 0.04; p=.25

Positive maternal mental health below median, n=484
Positive maternal mental health at/above median, n=766

B=0.31, 95%CI -0.51, 1.12; p=.46

B=0.12, 95%CI -0.52, 0.76; p=.71

CBCL total problem t-score

Early childhood   Late childhood