Table S1. Participant characteristics

		Overall	At least 2 measurements during the interpregnancy period		P- value
		(n=1047)	Yes (n= 276)	No (n= 771)	
Age at previous birth, mean ±SD		31 ±4	30 ±3,6	32 ±4	**<0.001**
Parity at baseline, n (%)	Primiparous	572 (55)	224 (81)	348 (45)	**<0.001**
	Multiparous	475 (45)	52 (19)	423 (55)	
Education at baseline, n (%)	Secondary degree	300 (29)	66 (24)	234 (30)	**<0.001**
	Bachelor degree	407 (39)	93 (34)	314 (41)	
	Master degree and above	340 (32)	117 (42)	223 (29)	
Ethnicity, n (%)	White European	963 (92)	266 (96)	697 (90)	**0.001**
	Other ethnicity	84 (8)	10 (4)	74 (10)	
Method of conception previous childbirth, n (%)	Spontaneous	920 (90)	241 (91)	679 (90)	0.81
	ART	100 (10)	25 (9)	75 (10)	
	Missing	27	10	17	
Method of delivery previous childbirth, n (%)	Spontaneous	702 (67)	184 (67)	518 (67)	**0.04**
	Vacuum- extraction/ forceps	99 (10)	37 (13	62 (8)	
	Primary section (planned)	119 (11)	19 (7)	100 (13)	
	Secondary section (urgent)	127 (12)	36 (13)	91 (12)	
Exclusive breastfeeding at 6 weeks postpartum, n (%)	Yes	561 (54)	178 (64)	383 (50)	**<0.001**
	No	486 (46)	98 (36)	388 (50)	
Family composition baseline, n (%)	Biological parents				
	Single parent family	75 (7)	14 (5)	61 (8)	**<0.001**
	Two parent family	893 (85)	253 (92)	640 (83)	
	Blended family	79 (8)	9 (3)	70 (9)	
Family income (monthly) at baseline, n (%)	Less than 2000 euro	69 (7)	13 (5)	56 (8)	**0.03**
	2000-3000 euro	179 (18)	36 (14)	143 (20)	
	3000-4000 euro	454 ((46)	124 (47)	330 (45)	
	4000 or above	284 (29)	88 (34)	196 (27)	
	Missing	61	15	46	
History of depressive feelings before previous childbirth, n (%)	Yes	153 (15)	30 (11)	123 (17)	**0.04**
	No	850 (85)	236 (89)	614 (83)	
	Missing	44	10	34	
History of anxiety feelings before previous childbirth, n (%)	Yes	112 (11)	27 (10)	85 (12)	0.57

	No	888 (89)	238 (90)	650 (88)	
	Missing	47	11	36	
Pre- pregnancy BMI previous pregnancy, n (%)	NW *	506 (48)	154 (56)	352 (46)	**0.003**
	OW	375 (36)	89 (32)	286 (37)	
	OB	166 (16)	33 (12)	133 (17)	
Interpregnancy Interval, n (%)	Short (<18 months)	.	145 (53)	.	
	Normal (18 to 60 months)	.	131 (47)	.	
GWG in kg previous pregnancy, mean (IQR)	Among NW	19 (4)	18 (3)	19 (4)	0.33
	Among OW	16 (6)	16 (6)	16 (6)	0.76
	Among OB	14 (4)	15 (5)	13 (6)	**0.02**
Depression score at baseline, mean (IQR)	EPDS (0-30)	6 (6)	6 (6)	7 (6)	**<0.001**
	GMDS (0-39)	5 (6)	4 (5)	6 (6)	**0.007**
Anxiety score at baseline, mean (IQR)	sSTAI (20-80)	37 (13)	37 (13)	40 (13)	**<0.001**
	EDS-3A (0-9)	4 (3)	3 (4)	4 (3)	**0.02**
QoL score at baseline, mean (IQR)	QoL (0-100)	80 (15)	80 (12)	77 (14)	**<0.001**
SOC score at baseline, mean (IQR)	SOC (13-91)	70 (16)	72 (14)	69 (16)	**0.004**
Interpregnancy Interval (months), mean (IQR)		.	17 (11)	.	

ART = assisted reproductive treatment; BMI= body mass index; NW= normal weight; OW= overweight; OB= obesity; sSTAI-6= spielberger State-Trait Anxiety Inventory- 6 item; EDS-3A = Edinburgh Depression Scale- 3 Anxiety subscale; EPDS= Edinburgh Postnatal Depression Scale; GMDS = Gotland Male Depression Scale; SOC-13 = Sense Of Coherence 13 item; GWG= gestational weight gain; QoL= Quality of Life; SOC= Sense Of Coherence. Significance level was calculated using the Likelihood ratio chi-square test or Lineair-by-Lineair Association for categorical variables and the Mann- Whitney U test for continue variables. Baseline = 6 weeks after childbirth - Inter-Conception Interval = time between childbirth and start next pregnancy.

* Two participants (0.7%) developed underweight before the start of the next pregnancy (BMI of 16.3 and 17.9 kg/m2 respectively), however being underweight before the next pregnancy was not an exclusion criteria. These women (n=2) were included and analyzed in the group of women with a healthy pre-pregnancy BMI before the next pregnancy (N=136; 49.3% of the total study population), because of the small sample size.