Galdiolo, S., Gaugue, J., Mikolajczak, M., & Van Cappellen, P. (2020). Development of trait emotional intelligence in response to childbirth: A longitudinal couple perspective. *Frontiers in Psychiatry, 11,* 560127.

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Development of Trait Emotional

Intelligence in response to Childbirth:

A Longitudinal Couple Perspective

Galdiolo, S. (UMONS)

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1

Trait Emotional Intelligence (EI)

- People with high trait EI (Petrides & Furnham, 2003)

    - Identify their own and others' emotions

    - Express emotions in socially acceptable manners

    - Understand their causes and consequences

    - Regulate them when they are inappropriate in a given context

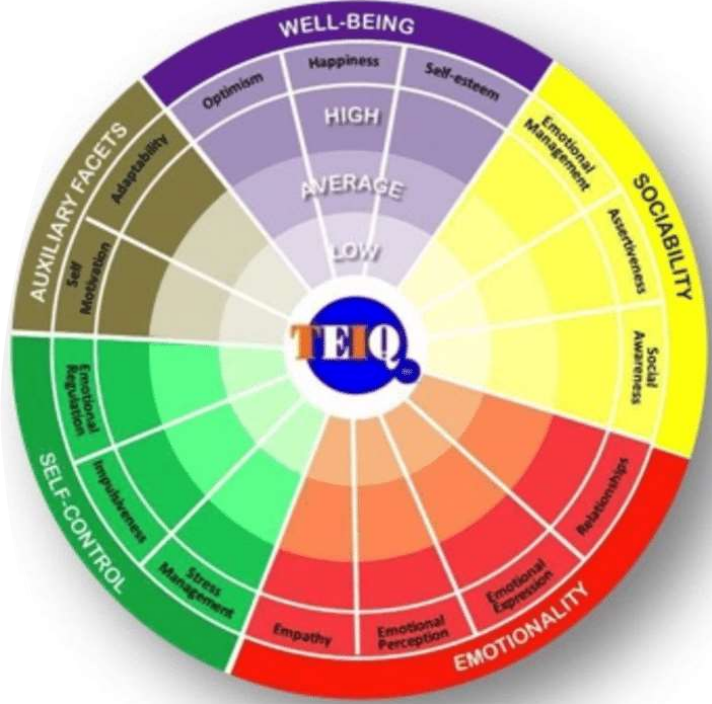   - Use emotions to improve their social relationships

→ **Well-being, health, & relationships**

2

Trait EI development

- Trait EI = subject to change (Pérez-Gonzalez et al., in preparation)
  - + 12 % in self-reports
  - + 6.6% in reports by spouses/friends

3

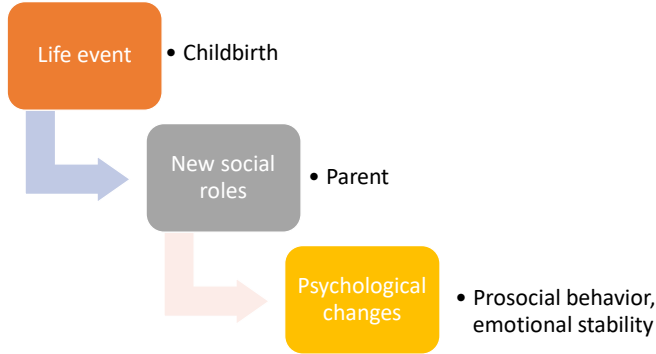Life events &

trait EI development

4

Childbirth & trait EI development

____

5

Childbirth & Trait EI development

Social Structural Theory (Eagly & Wood, 1999)

Social Investment Principle (Roberts et al., 2005)

Life event • Childbirth

New social roles • Parent

Psychological changes • Prosocial behavior, emotional stability

→ **Ho: Childbirth → Higher levels of EI**

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Childbirth & Trait EI development:
Two levels of influence

- Couple's level

- Gender roles' level

→ **Between-couples changes Ho**

→ **Within-couples changes Ho**

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Childbirth & Trait EI development: Primiparous vs. Multiparous parents?
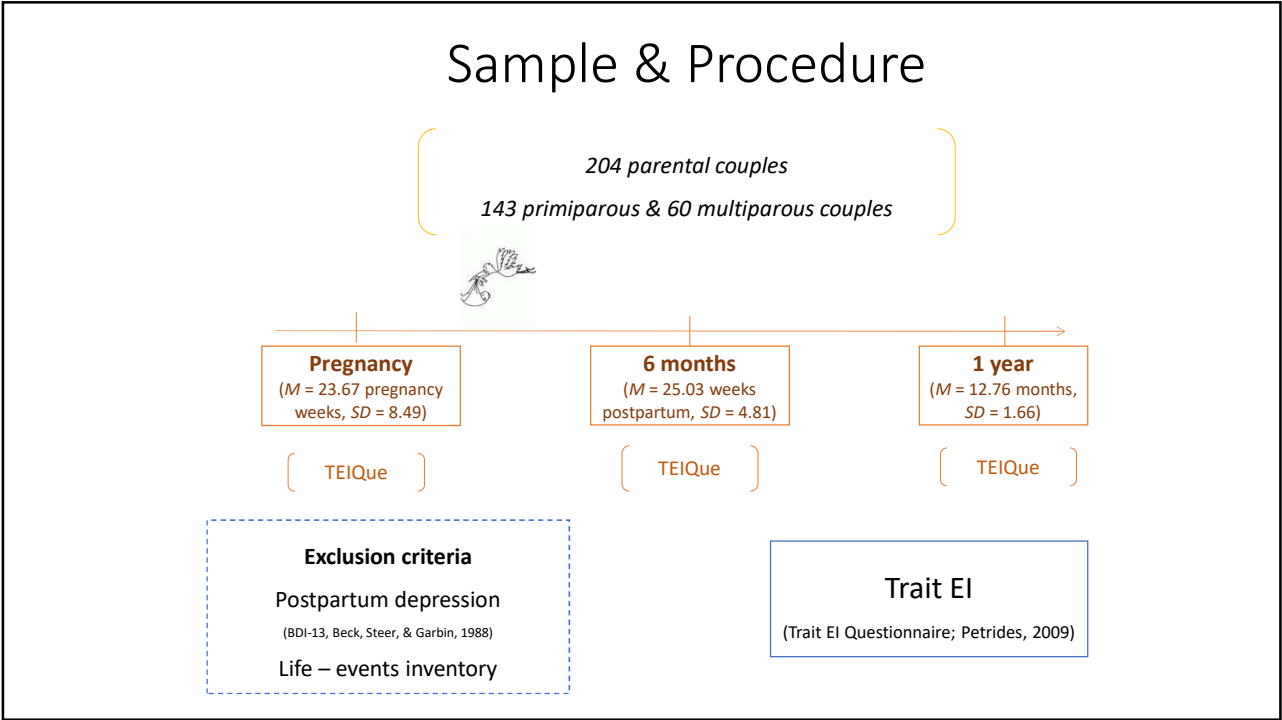

Transition to parenthood Ho

New baby Ho

8

Methods

Sample & Procedure

204 parental couples

143 primiparous & 60 multiparous couples

Pregnancy (M = 23.67 pregnancy weeks, SD = 8.49)	**6 months** (M = 25.03 weeks postpartum, SD = 4.81)	**1 year** (M = 12.76 months, SD = 1.66)
TEIQue	TEIQue	TEIQue

Exclusion criteria

Postpartum depression

(BDI-13, Beck, Steer, & Garbin, 1988)

Life – events inventory

Trait EI

(Trait EI Questionnaire; Petrides, 2009)

Method (2)

| Time 1 | | Time 2 (T1 + 6 months) |
| TEIQue | | TEIQue |

215 cohabiting non-parents
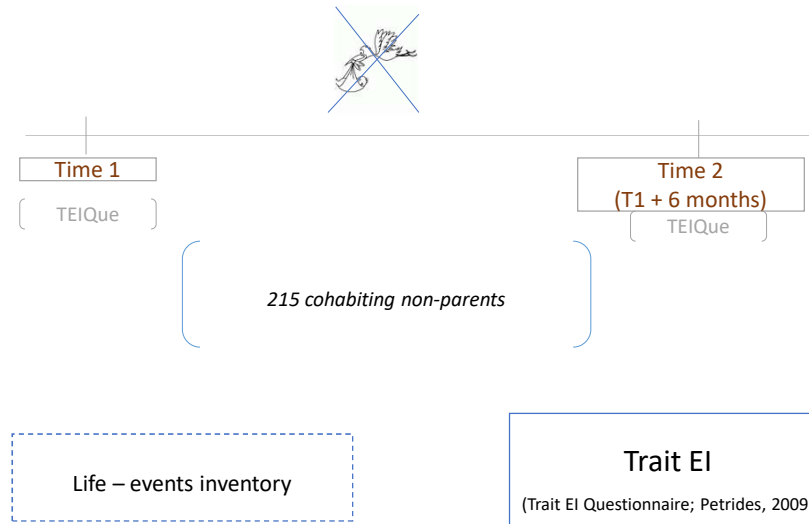
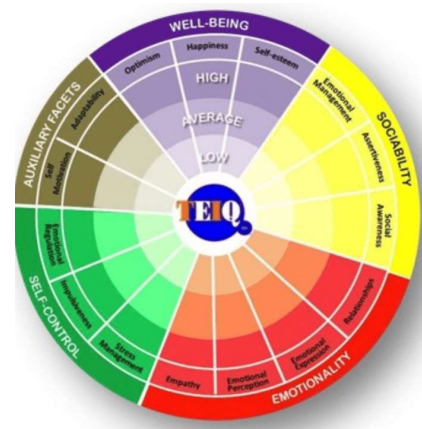Life – events inventory

Trait EI

(Trait EI Questionnaire; Petrides, 2009)

Measure: TEIQue

- Well-Being
  - « I feel that I have a number of good qualities »
- Self-Control
  - « On the whole, I'm able to deal with stress »
- Emotionality
  - « Expressing my emotions with words is not a problem for me. »
- Sociability
  - « I often find it difficult to stand up for my rights » (R)

Results

13

Parents: Actor – Partner Interdependence Model

TABLE 3 | APIM results: coefficients of the intercepts, linear changes (slopes), and predictors of parents' EI change, i.e., (a) between-dyads variable (parental group), (b) within-dyads variable (gender), and (c) mixed variables (partner's level of EI and age).

	Global EI			Self-control			Well-being			Emotionality			Sociability		
	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)
Intercept	3.67**	0.04	85.02	3.44**	0.04	78.37	3.91**	0.06	65.08	3.74**	0.05	68.43	3.51**	0.05	64.56
Slope	0.00	0.00	0.72	0.01*	0.00	2.31	−0.00	0.00	−1.06	0.00	0.00	0.21	0.00	0.00	1.11
Between–dyads var.															
Parental group	−0.00	0.00	−0.24	−0.00	0.00	−0.20	−0.00	0.00	−1.63	0.00	0.00	0.20	0.00	0.00	0.52
Within–dyads var.															
Gender	0.01	0.01	0.82	−0.00	0.01	−0.57	−0.00	0.01	−0.74	0.02*	0.01	2.37	0.01	0.01	0.78
Mixed variables															
Partner's level															
Within	−0.26**	0.03	−8.03	−0.23**	0.03	−6.90	−0.20**	0.03	−5.92	−0.38**	0.03	−12.04	−0.25**	0.03	−7.41
Between	−0.62**	0.04	−15.71	−0.71**	0.04	−17.55	−0.68**	0.04	−16.86	−0.54**	0.04	−14.25	−0.66**	0.04	−16.13
Age	0.00	0.00	0.50	0.00	0.00	1.09	−0.00	0.00	−0.85	0.00	0.00	0.42	0.00	0.00	1.03
Deviance		533.03			910.27			1171.71			1078.95			1068.92	

EI, Emotional Intelligence; Parental group as coded in −1 = multiparous and 1 = primiparous parents; Gender as coded in −1 = father and 1 = mother.
N = 408. *p < 0.05, **p < 0.001. Child. wom., Childless women; Child. men, Childless men.

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Parents' APIM: Intraindividual development of EI over time

TABLE 3 | APIM results: coefficients of the intercepts, linear changes (slopes), and predictors of parents' EI change, i.e., (a) between-dyads variable (parental group), (b) within-dyads variable (gender), and (c) mixed variables (partner's level of EI and age).

	Global EI			Self-control			Well-being			Emotionality			Sociability		
	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)
Intercept	3.67**	0.04	85.02	3.44**	0.04	78.37	3.91**	0.06	65.08	3.74**	0.05	68.43	3.51**	0.05	64.56
Slope	0.00	0.00	0.72	0.01*	0.00	2.31	−0.00	0.00	−1.06	0.00	0.00	0.21	0.00	0.00	1.11
Between-dyads var.															
Parental group	−0.00	0.00	−0.24	−0.00	0.00	−0.20	−0.00	0.00	−1.63	0.00	0.00	0.20	0.00	0.00	0.52
Within-dyads var.															
Gender	0.01	0.01	0.82	−0.00	0.01	−0.57	−0.00	0.01	−0.74	0.02*	0.01	2.37	0.01	0.01	0.78
Mixed variables															
Partner's level															
Within	−0.26**	0.03	−8.03	−0.23**	0.03	−6.90	−0.20**	0.03	−5.92	−0.38**	0.03	−12.04	−0.25**	0.03	−7.41
Between	−0.62**	0.04	−15.71	−0.71**	0.04	−17.55	−0.68**	0.04	−16.86	−0.54**	0.04	−14.25	−0.66**	0.04	−16.13
Age	0.00	0.00	0.50	0.00	0.00	1.09	−0.00	0.00	−0.85	0.00	0.00	0.42	0.00	0.00	1.03
Deviance		533.03			910.27			1171.71			1078.95			1068.92	

EI, Emotional Intelligence; Parental group as coded in −1 = multiparous and 1 = primiparous parents; Gender as coded in −1 = father and 1 = mother.
N = 408. *p < 0.05, **p < 0.001. Child. wom., Childless women; Child. men, Childless men.

→ **Stability of EI factors around childbirth, except for Self-Control that slightly increased**

15

Developmental trajectories of parents vs. nonparents

Selection effect?

Parents' baseline > Nonparents:

Global EI [$F(1, 619) = 6.42$, $p = 0.01$]

Self-Control [$F(1, 619) = 11.20$, $p < 0.001$]

Wellbeing [$F(1, 619) = 4.57$, $p = 0.03$]

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Developmental trajectories of parents vs. nonparents

Developmental trajectories

Slight increases for parents over time only for:

Global EI [$F(1, 616) = 8.23$, $p < 0.001$]

Self-Control [$F(1, 616) = 17.08$, $p < 0.001$]

17

Parents' APIM: Transition to parenthood Ho (Primiparous) vs. New Baby Ho (Multiparous)

TABLE 3 | APIM results: coefficients of the intercepts, linear changes (slopes), and predictors of parents' EI change, i.e., (a) between-dyads variable (parental group), (b) within-dyads variable (gender), and (c) mixed variables (partner's level of EI and age).

	Global EI			Self-control			Well-being			Emotionality			Sociability		
	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)
Intercept	3.67**	0.04	85.02	3.44**	0.04	78.37	3.91**	0.06	65.08	3.74**	0.05	68.43	3.51**	0.05	64.56
Slope	0.00	0.00	0.72	0.01*	0.00	2.31	−0.00	0.00	−1.06	0.00	0.00	0.21	0.00	0.00	1.11
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Parental group	−0.00	0.00	−0.24	−0.00	0.00	−0.20	−0.00	0.00	−1.63	0.00	0.00	0.20	0.00	0.00	0.52
Within–dyads var.															
Gender	0.01	0.01	0.82	−0.00	0.01	−0.57	−0.00	0.01	−0.74	0.02*	0.01	2.37	0.01	0.01	0.78
Mixed variables															
Partner's level															
Within	−0.26**	0.03	−8.03	−0.23**	0.03	−6.90	−0.20**	0.03	−5.92	−0.38**	0.03	−12.04	−0.25**	0.03	−7.41
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Age	0.00	0.00	0.50	0.00	0.00	1.09	−0.00	0.00	−0.85	0.00	0.00	0.42	0.00	0.00	1.03
Deviance		533.03			910.27			1171.71			1078.95			1068.92	

EI, Emotional Intelligence; Parental group as coded in −1 = multiparous and 1 = primiparous parents; Gender as coded in −1 = father and 1 = mother.
N = 408. *p < 0.05, **p < 0.001. Child. wom., Childless women; Child. men, Childless men.

→ **Same developmental trajectory around childbirth for primiparous and multiparous parents**

18

Parents' APIM: Within-couples changes Ho

TABLE 3 | APIM results: coefficients of the intercepts, linear changes (slopes), and predictors of parents' EI change, i.e., (a) between-dyads variable (parental group), (b) within-dyads variable (gender), and (c) mixed variables (partner's level of EI and age).

	Global EI			Self-control			Well-being			Emotionality			Sociability		
	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)	Coeff.	SE	t (1, 662)
Intercept	3.67**	0.04	85.02	3.44**	0.04	78.37	3.91**	0.06	65.08	3.74**	0.05	68.43	3.51**	0.05	64.56
Slope	0.00	0.00	0.72	0.01*	0.00	2.31	−0.00	0.00	−1.06	0.00	0.00	0.21	0.00	0.00	1.11
Between–dyads var.															
Parental group	−0.00	0.00	−0.24	−0.00	0.00	−0.20	−0.00	0.00	−1.63	0.00	0.00	0.20	0.00	0.00	0.52
Within–dyads var.															
Gender	0.01	0.01	0.82	−0.00	0.01	−0.57	−0.00	0.01	−0.74	0.02*	0.01	2.37	0.01	0.01	0.78
Mixed variables.															
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Within	−0.26**	0.03	−8.03	−0.23**	0.03	−6.90	−0.20**	0.03	−5.92	−0.38**	0.03	−12.04	−0.25**	0.03	−7.41
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N = 408. *p < 0.05, **p < 0.001. Child. wom., Childless women; Child. men, Childless men.

→ **Mothers' Emotionality slightly increased while fathers' Emotionality slightly decreased around childbirth**

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Parents' gender: Baseline level differences

Self-Control

- « On the whole, I'm able to deal with stress »

- **Fathers** > Mothers

- $F(1, 403) = 36.02$, $p < 0.001$

Emotionality

- « Expressing my emotions with words is not a problem for me »

- **Mothers** > Fathers

- $F(1, 403) = 17.04$, $p < 0.001$

20

Parents' APIM: Between-couples changes Ho

TABLE 3 | APIM results: coefficients of the intercepts, linear changes (slopes), and predictors of parents' EI change, i.e., (a) between-dyads variable (parental group), (b) within-dyads variable (gender), and (c) mixed variables (partner's level of EI and age).

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→ **Negative association between EI development of the actor in a parental couple and his or her partner's EI development**

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Discussion

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Stability of EI around childbirth

- Anticipatory changes (before childbirth)

- Development of new social roles during pregnancy

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Increase in parents' Self-Control

- Child's crying + Lack of sleep + All life changes
  - →strain parents' regulatory abilities
  - → Self-Control improvement

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Transition to parenthood Ho

New baby Ho

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Weak within-couples changes

Except for Emotionality

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Between-couples changes

- Dyadic developmental trajectory of EI

- Compensatory effects

Galdiolo, S., Gaugue, J., Mikolajczak, M., & Van Cappellen, P. (2020). Development of trait emotional intelligence in response to childbirth: A longitudinal couple perspective. *Frontiers in Psychiatry, 11,* 560127.

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THANK YOU !!

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