

The role of mother's prenatal compassion and psychological flexibility in postpartum mother-to-infant bonding

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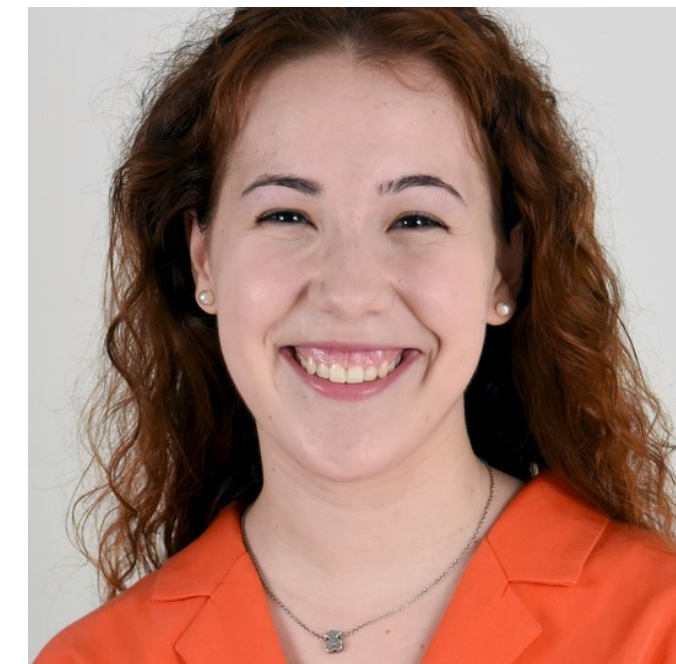
Our Project



Care4mommies: The longitudinal impact of psychological flexibility and compassion on mother-baby bonding

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The team



Our Project



Care4mommies: The longitudinal impact of psychological flexibility and compassion on mother-baby bonding

Aim:

To explore the longitudinal impact of mothers' compassion and psychological flexibility on the quality of mother-baby bonding over time.




Three-times longitudinal design

- T0: the sixth month of pregnancy;
- T1: three-month-old baby;
- T2: nine-month-old baby.



- The transition to motherhood encloses several challenges that can hinder women's psychological well-being and impact mother-baby bonding (O'Hara & Wisner, 2014; Slade et al., 2009)
- While maternal mental health difficulties during pregnancy may increase the risk of poor adjustment in the postnatal period, positive affect and optimism are considered prenatal positive mental health traits that may protect mothers against postpartum depression (Bos et al., 2013; Robakis et al., 2015)
- Better quality of bonding has been related to more maternal sensitivity and involvement during the interaction with their infant and more positive child socio-emotional functioning (de Cock et al., 2016; Maas et al., 2016; Mason et al., 2011; Siddiqui & Hägglöf, 2000)



Therefore, it seems important to **focus on protective factors, particularly mothers' personal and modifiable characteristics**, that may enhance the quality of this bond in the postnatal period.



Psychological Flexibility

Found to be akin to change

(Brandon et al., 2021)

Related to a possible decrease of mother's depressive and anxiety symptoms in the postpartum period

(Monteiro et al., 2019; Stotts et al., 2019)

Associated with better mental health outcomes and better skills to cope with stressful life events

(e.g., A-tjak et al., 2015; Kashdan & Rottenberg, 2010)

May play a key role in positive parenting practices by influencing the mother's capacity to manage her emotions and behavior in a way that promotes attentive responses to her child's necessities

(Fonseca et al., 2020)



Particularly, self-compassion:

Associated with several positive outcomes across various populations

(e.g., Liao et al., 2021; Phillips & Hine, 2021)

Significant predictor of mutual attunement in mother-child relationship

(Whittingham & Mitchell, 2021)

Important on the establishment of mother-infant bonding in the postpartum period

(Fernandes et al., 2021)

Can be a protective emotional regulation strategy in the postpartum period

(Pedro et al., 2019)

Objective

To examine whether mother's prenatal compassion and psychological flexibility have an impact on mother-infant bond in the postpartum period.



219 women

- Aged between 18 and 45 ($M = 32.11$, $SD = 4.32$)
- The majority completed higher education ($n = 179$, 81.8%)
- Most were married or in a de facto relationship ($n = 172$, 78.5%)
- For whom this was the first pregnancy ($n = 134$, 61.2%)

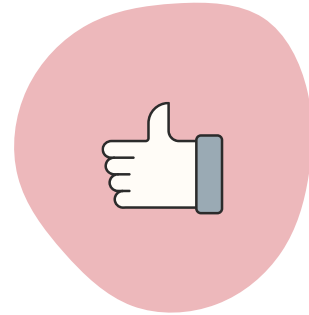
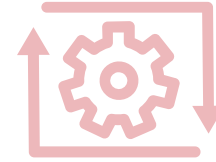
Inclusion criteria:

- a) being 18-year-old or older;
- b) being fluent in Portuguese language;
- c) having internet access.

Methods



Procedure



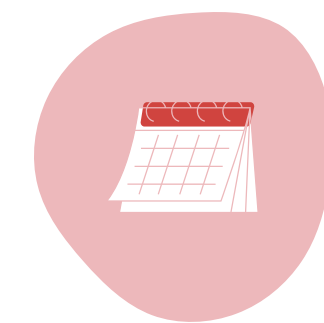
Approval from the Institutional Ethics Committee



Participants' recruitment took place via social media and through acquaintances of the research team



Disseminated via a Qualtrics link



Data collection

T0: between september 2022 and january 2023
T1: between january 2023 and june 2023

Methods



Measures



INSTRUMENT

CONSTRUCT/ DIMENSIONS

INTERNAL CONSISTENCY

Sociodemographic information

E.g.: age, educational level, number of children, risk pregnancy and psychological intervention

Compassion Action and Engagement Scales
(Gilbert et al., 2017)

- Self-compassion (motivation and action)
- Compassion to others (motivation and action)
- Compassion received from others (motivation and action)

$\alpha = .87$ ($\alpha = .72$ and $\alpha = .91$)
 $\alpha = .88$ ($\alpha = .81$ and $\alpha = .87$)
 $\alpha = .95$ ($\alpha = .91$ and $\alpha = .92$)

Comprehensive Assessment of Acceptance
and Commitment Therapy Processes
(CompACT) (Francis et al., 2016)

- Openness to experience
- Behavioural awareness
- Valued action

$\alpha = .73$
 $\alpha = .83$
 $\alpha = .85$

Postpartum Bonding Questionnaire
(Brockington et al., 2001)

Mother-infant bonding

$\alpha = .76$ (total)

Results



Correlations with Bonding



Sociodemographic variables

- Risk pregnancy: .14*
- Psychological intervention: $-.23^{**}$
- Age: $-.07$
- Educational level: $-.10$
- Number of children: .09

Compassion

- SC Motivation: .16*
- SC Action: .31**
- CTO Motivation: .11
- CTO Action: .16*
- CFO Motivation: .13
- CFO Action: .14*

Psychological Flexibility

- Openness to experience: .08
- Behavioural awareness: .27**
- Valued action: .31**

** $p \leq .01$
* $p \leq .05$



Compassion

Mother-infant bonding (T1)

	β	t	R ²	F(2)
Model 1			.06	6.07**
Risk pregnancy (T0)	.14	1.99*		
Psychological intervention (T0)	-.19	-2.78**		

** $p \leq .01$ * $p \leq .05$

Results



Regression



Mother-infant bonding (T1)

Compassion

	β	t	R^2	R^2 (change)	$F(8)$
Model 2			.17	.11***	4.90***
Risk pregnancy (T0)	.11	1.70			
Psychological intervention (T0)	-.17	-2.51*			
SC Motivation (T0)	-.12	-1.32			
SC Action (T0)	.35	3.76***			
CTO Motivation (T0)	-.02	-.20			
CTO Action (T0)	.14	1.52			
CFO Motivation (T0)	.02	.13			
CFO Action (T0)	-.02	-.17			

*** $p \leq .001$
* $p \leq .05$



Psychological Flexibility

Mother-infant bonding (T1)

	β	t	R ²	F(2)
Model 1			.06	6.07**
Risk pregnancy (T0)	.14	1.99*		
Psychological intervention (T0)	-.19	-2.78**		

** $p \leq .01$
* $p \leq .05$

Results



Regression



Psychological Flexibility

Mother-infant bonding (T1)

	β	t	R ²	R ² change	F(5)
Model 2			.15	.10***	7.19***
Risk pregnancy (T0)	.15	2.22*			
Psychological intervention (T0)	-.12	-1.77			
Openness to experience (T0)	.03	.06			
Behavioural awareness (T0)	.11	.05*			
Valued action (T0)	.15	.05**			

*** $p \leq .001$
** $p \leq .01$
* $p \leq .05$

Discussion



- Mothers undergoing psychological intervention during pregnancy reported worse mother-infant bonding quality. This is in line with previous studies which demonstrated that mothers' psychological difficulties are associated with higher levels of impaired bonding (Biaggi et al., 2021; Lutkiewicz et al., 2020; Nakano et al., 2019; Radoš et al., 2020).
- Our findings suggest the importance of self-compassion, in the establishment of mother-infant bonding, and its possible protective role, in the postpartum period, which is aligned with results from previous correlational studies (Fernandes et al., 2021; Pedro et al., 2019). Our results highlight the relevance of self-compassion actions in specific.
- Mothers' abilities to behave in accordance with their own life values and be aware of their behavioral patterns during pregnancy contributed to the quality of their bond with their newborn. This aligns with previous studies (Araújo, 2022; Evans et al., 2012; Whittingham & Mitchell, 2021),, which emphasized the significant role of psychological flexibility in enhancing the quality of mother-to-infant bonding.



Limitations

- Lack of representativity (e.g., 82% of participants completed a higher education level)
- Low variance mother–baby bonding variance explained by the models
- We did not include other relevant variables such as the baby's temperament and the mother's attachment style

Conclusion



Particularly self-compassionate actions, behavioural awareness and valued action, **may be possible protector factors to mother-infant bonding.**

Results highlight the importance of delivering **interventions, in the perinatal period,** focused on the promotion of these skills. This can help mothers acquiring resources that may be beneficial for the relationship with their infants.

Thank you for your attention! 😊

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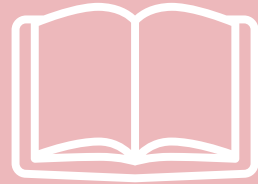
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