Exploring a Model of Depressive Symptoms, Negative Body Image, and Mindful Self-care in Pregnancy and Mothers of Young Children

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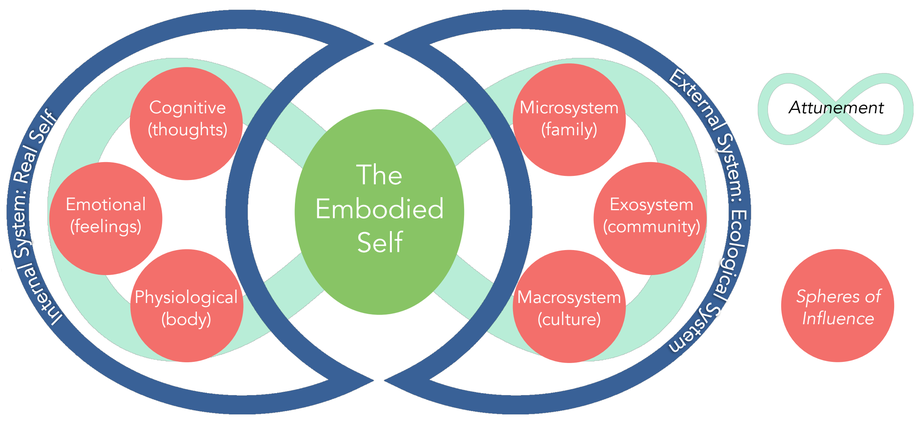
Abstract

Depressive symptoms undermine women's health and well-being across the developmental transitions of pregnancy through early motherhood. Negative body image (NBI) may influence depressive affect and compromised self-care and caregiving behaviors during these stages. Mindful self-care (MSC) practices may bolster an individual's ability to negotiate the regulation of the internal and external self-systems to improve overall well-being. The current study tested a preliminary indirect effect model of MSC behaviors predicted by depressive symptoms via NBI among a nationally-recruited sample of 77 women navigating pregnancy, the postpartum, and early motherhood. Findings inform the evaluation of prospective models and development of body image-targeted interventions for enhancing self-care and well-being among women navigating these stages of pregnancy and early motherhood.

Introduction

- NBI during pregnancy and the early postpartum is associated with symptoms of depression, as well as disturbances in self-care and caregiving behaviors [1-4].
  - Research supports positive associations between NBI and health risk behaviors, such as smoking and disordered eating during pregnancy [4].
  - NBI has also been suggested to present a risk to the maternal-infant relationship through interference with the development of maternal-fetal attachment [5] and lessened intention to breastfeed [6].
- Individual and relational implications of NBI during pregnancy and the postpartum period underscore the importance of examining self-regulatory processes during this transitional period. Nevertheless, previous research has typically not included exploring the experiences of women in this context beyond the first-year postpartum.
- The Attunement Model of Wellness and Embodied Self-Regulation [AMWESR; 7] illustrates processes of harmonious balance between internal (i.e., psychophysiological) and external (i.e., social and ecological) self-systems, maintained through MSC practices which emphasize the whole, embodied, and authentic self.
  - The dimensions of MSC include Physical Care, Supportive Relationships, Mindful Awareness, Self-Compassion and Purpose, Mindful Relaxation, and Supportive Structure.
  - Previous research indicates that MSC is inversely related to disordered eating and positively associated with dimensions of body esteem [8].
- Given the interrelationships among depression, NBI, and self-care practices observed in prior research, the AMWESR suggests that MSC practices would reflect regulation or dysregulation (i.e., depressive symptoms or NBI) in the internal-external balance.
- Therefore, we explored whether NBI helped explain the predicted positive link between depressive symptoms and MSC in our sample of women traversing the continuum of motherhood from pregnancy through caring for children ages 1-5.

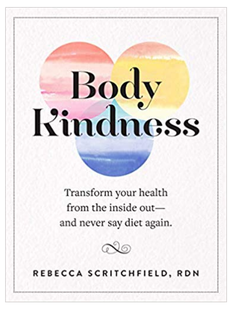
Figure 1. The Attunement Model of Wellness and Embodied Self-Regulation [7].



Method

Participants: 77 US women over the age of 18 who were currently pregnant (n = 19), within the first year postpartum (n = 20), or mothering children aged 1 through 5 (n = 38) completed an online survey.

Recruitment: Participants were recruited using the social media, website, and Listservs of the second author, a registered dietitian nutritionist, certified exercise physiologist, and author of *Body Kindness*. Participants were offered a *Body Kindness* e-book for their time.



Measures:

Depressive symptoms were measured using the Edinburgh Peri/Postnatal Depression Scale [9]

NBI was measured using the Eating Disorder Examination Questionnaire [10]

MSC was measured via the Mindful Self-care Scale [8]

Data Analyses: Means and standard deviations were calculated. Correlations were computed among continuous study variables. Hayes' PROCESS macro model 4 was used to test the indirect effect model [11].

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Results

- Depressive symptoms were positively correlated with NBI and negatively associated with MSC. NBI was inversely related to MSC (see Table 1).
- Both depressive symptoms and NBI were inversely associated with the constituent dimensions of MSC (see Table 1).

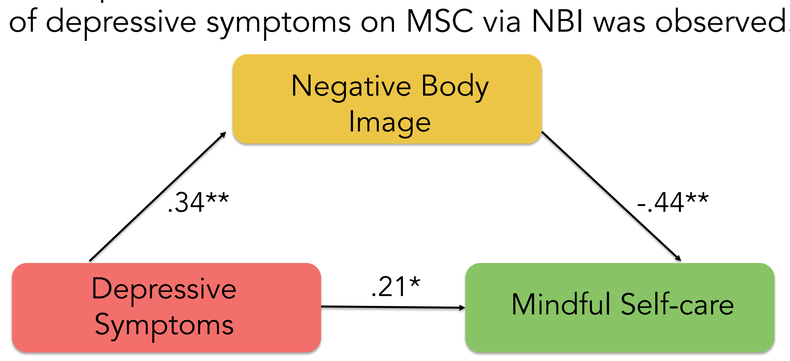
Table 1. Means, Standard Deviations, and Intercorrelations for Primary Study Variables

	DEP	NBI	MSC	PC	SR	MA	SP	MR	SS
M	8.43	4.07	13.92	1.99	2.98	2.39	2.31	1.88	2.44
SD	5.09	1.67	3.70	.75	.80	.93	0.82	.78	.83
DEP		.34**	-.36**	-.04	-.27*	-.53**	-.32**	-.19	-.22
NBI			-.51**	-.32**	-.21	-.54**	-.42**	-.41**	-.40**

Note. Significant at 0.05 level; Significant at the 0.01 level**; DEP = depressive symptoms; NBI = negative body image; MSC = mindful self-care; PC = physical care subscale; SR = supportive relationships subscale; MA = mindful awareness subscale; SP = self-compassion and purpose subscale; MR = mindful relaxation subscale; SS = supportive structure subscale*

- Figure 2 presents the graphical representation of the tested indirect effect model. A significant indirect effect of depressive symptoms on MSC via NBI was observed.

Figure 2. The indirect effect of Depressive Symptoms on MSC via NBI (β = -.15).



Discussion and Implications

- Aligned with AMWESR, our study is the first to explore the relationships among depressive symptoms, NBI, and MSC in a sample of women traversing pregnancy through early motherhood.
- Our findings extend previous research by identifying NBI as a relevant experience linking elevated depressive symptoms and compromised self-care among women negotiating pregnancy and caring for infants and young children.
- These preliminary findings uniquely contribute to the growing literature aiming to clarify factors that may adversely impact adaptive self-regulatory and embodiment processes in pregnancy, the postpartum, and the early caregiving years.

Strengths and Limitations

- Novel exploration of predictors of MSC in an understudied vulnerable population
- Multiple recruitment efforts to obtain a nationally-derived sample
- Cross-sectional data precludes making inferences of causality
- The small, socio-demographically homogenous sample limits generalizability

Future Research Directions

- Assessing the tenability of the model in larger more representative samples with respect to race/ethnicity, SES, relationship status, age, etc.
- Evaluating the strength of model effects at different stages along the continuum of motherhood
- Expanding the model to incorporate other relevant factors such as positive body image and interoceptive attunement
- Developing interventions that specifically target healing NBI towards reducing psychological distress and bolstering embodied well-being and MSC among women during pregnancy through early motherhood
- Utilizing qualitative methods to further enhance our understanding of the experiences of NBI in the context of depressive symptoms and their impact on both self-care and caregiving processes in women along this developmental continuum of motherhood

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