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**The Relationship between Depression and Body Dissatisfaction across Pregnancy
and the Postpartum: A Prospective Study**

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Abstract

The aims of this study were to explore changes in levels of depression and body dissatisfaction across pregnancy and the postpartum, to examine the relationship between depression and body dissatisfaction during this time, and also to examine prospectively the predictive relationship between depression and body dissatisfaction across the perinatal period. Pregnant women ($N=116$) completed questionnaires assessing depression levels and body image on five occasions from 3 months pre-pregnancy (retrospective) to 12 months postpartum. During pregnancy, perceived attractiveness and strength/fitness remained stable, while feeling fat and salience of weight and shape decreased in late pregnancy. During the postpartum, feeling fat and salience of weight/shape increased. Depression and body dissatisfaction scores were correlated significantly with each other concurrently and across multiple time points. However, in baseline-controlled prospective analyses, only a model of greater depression late in pregnancy predicting body dissatisfaction at 6 weeks postpartum and feeling fat throughout the postpartum was supported.

Key words: pregnancy, postpartum, depression, body dissatisfaction, body image

Pregnancy and the postpartum are periods of significant developmental transition, comprising numerous physiognomic and psychosocial changes over a short time span (Franko & Walton, 1993; Rocco et al., 2005). Significant psychological sequelae can result from such changes (DiPietro, Millet, Costigan, Gurewitsch, & Caulfield, 2003; Sherr, 1995), including a concern about body image (Earle, 2003; Fairburn & Welch, 1990; Liefer, 1977; Skouteris, Carr, Wertheim, Paxton, & Duncombe, 2005) and depressive symptoms (Bonari et al., 2004; Field et al., 2004, Milgrom, Martin, & Negri, 1999). The term *body image* is conceptualised as one's internal representation of one's outer appearance, and includes cognitive, perceptual, and attitudinal components (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). *Body dissatisfaction* is the subjective negative evaluation of one's figure or body parts and is multidimensional in nature (Presnell, Bearman, & Stice, 2004). Given that body dissatisfaction is often linked with depressive symptomatology in non-pregnant females (e.g., Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006; Wildes, Simons, & Marcus, 2005), it is surprising that there is a paucity of research exploring the relationship between body dissatisfaction and depression during pregnancy and the postpartum; moreover, the two studies conducted have been cross-sectional (DiPietro, Millet, Costigan, Gurewitsch, & Caulfield, 2003) or correlational between two postpartum time points (Walker, Timmermann, Kim, & Sterling, 2002).

The overall objective of the present study was to examine body dissatisfaction and depression in a sample of women who were tracked prospectively from 17-21 weeks gestation (with retrospective reports of pre-pregnancy taken at this time) to 12 months post birth. Theorists have posited two possible models to explain the

relationship between these two variables, both of which were tested here. The first proposed model is of body dissatisfaction leading to depression. This model asserts that current societal standards for beauty place excessive emphasis on the importance of thinness and other often unattainable standards of beauty (Thompson et al., 1999). Considering that a significant elevation of body mass and adiposity occurs during pregnancy (Richardson, 1990), women move away from the thin ideal imposed by the media and society (Abraham, Taylor, & Conti, 2001; Rocco et al., 2005). This deviation results in body dissatisfaction (Stice, Hayward, Cameron, Killen, & Taylor, 2000), which contributes to depression, because appearance is a central dimension on which females are evaluated (Stice et al., 2000). This model may also apply during the postpartum, when women often retain weight from pregnancy (Stein & Fairburn, 1996) setting the context for body dissatisfaction, and in turn depression. Support for this model stems from longitudinal research with adolescent girls (Holsen, Kraft, & Roysamb, 2001; Paxton et al., 2006; Stice & Bearman, 2001; Stice et al., 2000), and postpartum women at two time points: after delivery and 6 weeks after birth (Walker et al., 2002).

An alternative model is of depression predicting body dissatisfaction (Cohen-Tovee, 1993; Keel et al., 2000; Striegel-Moore, McAvay, & Rodin, 1986). The cognitive model of depression posits that one's cognitions are based upon attitudes developed from previous experience, and these may be rigid and extreme, and hence maladaptive (Beck, Rush, Shaw, & Emery, 1979). Given that depression involves negative appraisals of the self, body dissatisfaction may follow, as body dissatisfaction too is a negative appraisal of the self (Thomson et al., 1999). Longitudinal and cross-

sectional evidence for this model stems from research with adolescent girls and non-pregnant adult women (Cohen-Tovee, 1993; Keel et al., 2000; Striegel-Moore, McAvay, & Rodin, 1986), pregnant women (Skouteris et al., 2005) and postpartum women (Rallis, Skouteris, Wertheim, & Paxton (2007).

A third possible model is that the relationship between body dissatisfaction and depression is bi-directional. Studies of the relationship between psychological well-being variables and perceptions of body image have not provided conclusive findings, particularly given that most such studies have been conducted with adolescents (e.g. Stice et al., 2000; Stice & Bearman, 2001). One must be cautious about translating the findings of adolescent research to pregnant and adult populations as these groups can differ on characteristics such as developmental stage of life and perceptions of societal expectations. Given the rapid body changes that accompany pregnancy and the first year post birth, this is an ideal time to explore relationships between body dissatisfaction and depression.

There were three specific aims in this study. The first was to explore the changes in levels of depression and body dissatisfaction across pregnancy and the first year postpartum. Body dissatisfaction was measured across four dimensions– feeling fat, attractiveness, salience of weight and shape, and strength and fitness. It was hypothesised that body dissatisfaction would be higher during the postpartum period than during pregnancy (Lombardo, 2001; Rallis et al., 2007, Rocco et al., 2005; Rubin, 2006; Skouteris et al., 2005 Stein & Fairburn, 1996). The second aim was to examine the relationship between depression and body dissatisfaction across the perinatal period.

It was predicted that depression and body dissatisfaction would be associated (DiPietro et al., 2003; Rallis et al., 2007; Skouteris et al., 2005; Walker et al., 2002).

The third aim was to examine prospectively the predictive relationship between depression and body dissatisfaction across pregnancy and the postpartum. Based on previous research with non-pregnant adult populations (Keel et al., 2000; Striegel-Moore, McAvay & Rodin, 1986) and pregnant and postpartum women (Rallis et al., 2007; Skouteris et al., 2005), it was expected that a model of depression predicting later body dissatisfaction would be supported. Given that previous research has not examined this relationship over the whole course of pregnancy and the postpartum, it was unclear at what specific time point(s) depression would predict body dissatisfaction.

Methods

Participants

Participants were 116 pregnant women living in Australia who were recruited at 12-17 weeks originally for a study exploring health and well being during pregnancy (see Skouteris et al., 2005) and then agreed to participate in the postpartum phase of the research. Forty-four women from the original study chose not to participate in the postpartum and another 36 women were omitted because they did not complete all data points. Completing and non-completing groups did not differ significantly on any demographic variables ($p > 0.05$ for all analyses).

At study outset, participants' age ranged from 21 to 41 years ($M = 31.78$, $SD = 3.71$), with a mean body mass index (BMI) of 25.7 (range 18.94 – 35.63). Women were

either married (88.8%) or in de-facto relationships (11.2%), with 78% completing university. Half the women (50.9%) were primiparous, 78.2% reported an annual household income exceeding A\$70,000 (approximately US\$54,000), and 14% reporting household income below A\$50,000. Most participants were born in Australia (87.9%), and most had both parents born in Australia ($n=71$, 61.2%), with 30.1% ($n=24$;) having both or one parent born in Europe.

Measures

Participants completed questionnaires at five time points including: Pregnancy Time 1 (PregT1) or 17-21 weeks gestation, at which time participants also reported retrospectively on the period 3 months pre-pregnancy (Pre-preg); Pregnancy Time 2 (PregT2) or 32 – 35 weeks gestation; Postpartum Time 1 (PPT1) or 6 weeks postpartum; Postpartum Time 2 (PPT2) or 6 months postpartum; and Postpartum Time 3 (PPT3) or 12 months postpartum.

Demographics. At PregT1, women completed a questionnaire covering their current weight and height, age, parity status, education level, annual household income, marital status, and ethnicity. At each subsequent time point, participants again reported current weight and height.

Depression. The short form of the Beck Depression Inventory (BDI; Beck & Beck, 1972) measured depression levels from PregT1 to PPT3. All but one of the 13 items were included (the item regarding suicide); higher total scores indicate greater depressive symptomatology. The BDI is widely used and long and short version scores correlate .89 to .97 (Beck, Rial, & Rickels, 1974). Concurrent validity has been

reported (Storch, Roberti, & Roth, 2004). The BDI has been shown to have high sensitivity in detecting depression in a pregnant sample (Holcomb, Stone, Lustman, Gavard, & Mostello, 1996). In the current sample Cronbach's $\alpha = .75$ (PregT1); .90 (PregT2); .80 (PPT1); .82 (PPT2); and .74 (PPT3).

Body dissatisfaction. Four subscales from the Body Attitudes Questionnaire (BAQ; Ben-Tovim & Walker, 1991) assessed body image at each time point. The subscales were: *Feeling Fat, Strength and Fitness (Strength), Saliency of Weight and Shape (Saliency), and Attractiveness*. The BAQ was developed using an Australian sample, and subscales yielded valid and reliable scores (Ben-Tovim & Walker, 1991). Ben-Tovim and Walker demonstrated test-retest reliability ($r_s = .64$ to $.90$) and high convergent and discriminant validity for the scale scores. Cronbach's alphas at the six time points were Feeling Fat (12 items) = $.90$ to $.94$; Attractiveness (5 items) Pre-preg = $.65$, PregT1 to PPT3 = $.71$ -. $.77$; Saliency (5 items) PregT2 = $.73$, other time points = $.80$ - $.87$; and Strength (6 items) = $.71$ - $.83$.

Procedure

Following relevant University human ethics approval and written informed consent, participants were sent code-numbered questionnaires with reply paid envelopes at each of the five time points, with retrospective data being collected at the first data collection point (PregT1). Demographics were assessed at Time 1, and at each time point, height, weight, depression and body dissatisfaction were assessed.

Data Analysis

To address skewness, square root transformations were applied to BDI scores. Changes in mean BDI and BAQ subscale scores across time points were examined via one-way repeated measures analyses of variance (ANOVA) and the effect sizes (η^2) of significant ($p < .05$) post-hoc paired-sample t-tests are reported. Product-moment correlations explored relationships between BDI scores and BAQ subscales. Finally, three models were assessed of the prospective relationship between BDI and BAQ scores. The first was a stability model whereby BDI and BAQ at each time point would correlate highly with the same measure at the following time point. The second model was of BAQ prospectively predicting BDI, and the third model was of BDI prospectively predicting BAQ. Models 2 and 3 were tested through partial correlations in which first, BAQ at each time point was correlated with BDI at the next time point with BDI at the earlier time point partialled out and then the reverse analyses were conducted, that is, earlier BDI predicting later BAQ partialling out earlier BAQ.

Results

Changes in Depression and Body Dissatisfaction Scores Over Time

Differences in mean BDI scores across five time points (excluding 3 months pre-pregnancy) and mean BAQ scores across the six time points were examined using ANOVA (see Table 1).

Insert Table 1 about here

Depression. A significant time effect was found for Depression, $F(4, 88) = 4.66, p = .002, \eta^2 = .18$, with women reporting significantly higher depressive

symptomatology at PregT2 (32-35 weeks gestation) compared to all other time points: PregT1, $\eta^2=.07$; PPT1, $\eta^2=.06$; PPT2, $\eta^2=.13$; and PPT3, $\eta^2=.18$. Depression was lowest at PPT3, with BDI scores at this point significantly lower than at PregT1, $\eta^2=.05$, and PPT1, $\eta^2=.06$.

At PregT1, 68.0%, 18%, and 12% of participants scored in the non-depressed (total score of 0-3), mild (4-7) and moderate (8-15) categories, respectively, with no women in the severe range (16+). At PregT2: non-depressed= 63.4%, mild= 22.8%, moderate= 7.9%, and severe= 5.9%; PPT1: non-depressed =65.3%, mild=23.8%, moderate=8.9%, and severe= 2%; PPT2: 64.6%, 23%, 11.5%, and 0.9%, respectively; and PPT3: 66.4%, 23.3%, 10.3%, and 0%, respectively.

Body dissatisfaction. A significant time effect for BAQ Feeling Fat, $F(5, 81) = 13.47, p < .001, \eta^2 = .45$, revealed many significant differences between time points. Women reported feeling least fat at PregT2 (32-35 weeks gestation) when compared to all other time points (pre-pregnancy $\eta^2=.08$; PregT1=.09; PPT1=.40; PPT2=.42, and PPT3=.25). Women felt most fat at PPT2, (compared to pre-pregnancy $\eta^2=.20$; PregT1=.19; PregT2=.42, and PPT3=.09) and also fatter at PPT3 than PPT1 ($\eta^2=.05$). Women also reported feeling fatter at PPT1 ($\eta^2=.14$); and PPT3 ($\eta^2=.08$) than at pre-pregnancy. Similarly, women felt fatter at PPT1 ($\eta^2=.14$) and PPT3 ($\eta^2=.08$) than at PregT1.

A significant time effect was found for Saliency, $F(5, 86) = 7.53, p < .001, \eta^2 = .305$. Women reported least weight and shape saliency at PregT2 (compared to pre-pregnancy, $\eta^2=.21$; PregT1 =.13; PPT1 =.15; PPT2 =.16; and PPT3 =.07). At PPT2,

women reported more salience than at PPT3 ($\eta^2=.05$). Finally, women reported significantly less salience at PregT1 than at pre-pregnancy ($\eta^2=.05$).

The Strength subscale also yielded a significant time effect, $F(5, 84) = 7.87$, $p < .001$, $\eta^2 = .32$. Women felt least strong and fit at PregT1 (compared to pre-pregnancy $\eta^2=.23$), PregT2 =.07, PPT1=.15, PPT2=.14), and PPT3=.22). Women also felt less strong/fit at PregT2 than at pre-pregnancy ($\eta^2=.09$) or the postpartum (PPT1, $\eta^2=.07$; PPT2, $\eta^2=.08$; PPT3=.12).

No significant time effect was found for Attractiveness, $F(5, 86) = 2.13$, $p = .07$, $\eta^2 = .11$.

The Relationship Between Depression and Body Dissatisfaction Scores

Table 2 shows correlations between BDI and BAQ subscale scores. There were significant correlations across all 5 time points for BAQ subscales (with the exception of BDI and Salience at PregT1 which approached significance), indicating a concurrent relationship between depression and body dissatisfaction at each of these time points¹.

Insert Table 2 about here

The Predictive Relationship Between Depression and Body Dissatisfaction Across Pregnancy and the Postpartum.

Figure 1 displays correlations testing stability models for BDI and for Feeling Fat scores as well as partial correlations testing Models 2 and 3. First, strong stability models were supported for both BDI and Feeling Fat, with moderate to high r s between

time points for like measures. In addition, when PregT2 Feeling Fat was controlled for, BDI at PregT2 predicted Feeling Fat at PPT1, PPT2, and at PPT3 (see Figure 1).

Insert Figure 1 about here

For the other three subscales, greater depressive symptoms at PregT2 predicted decreased Attractiveness, $r=-.21$, $p<.05$; increased Salience, $r=.31$, $p<.01$; and decreased Strength, $r=-.30$, $p<.01$, at PPT1, after controlling for concomitant body dissatisfaction at PregT2. No other significant prospective relationships were found.

All partial correlation analyses were replicated with Questions 9 to 12 of the short form BDI removed (i.e., items relating to attractiveness, work inhibition, fatigability and loss of appetite). All significant prospective findings were replicated when these items were excluded, indicating that confounds based on body image or physical symptoms associated with pregnancy and postpartum changes did not explain the results.

Discussion

The first aim in this study was to explore changes in the level of depression and body dissatisfaction across pregnancy and the first year postpartum. Our prediction that body dissatisfaction would be greater during the postpartum period compared to during pregnancy was partially supported since women reported feeling significantly fatter, and experiencing their weight and shape as more salient at all three postpartum time points compared to during pregnancy. However, women reported feeling the least strong and fit at early pregnancy, with levels returning to pre-pregnancy levels by 12 months

postpartum, whilst general self-perceptions of feeling attractive did not change across the perinatal period.

Despite women reporting the least body dissatisfaction during late pregnancy, they reported significantly more depressive symptomatology at this time than at any other point in pregnancy or the postpartum. Depressive symptoms decreased progressively from late pregnancy to 12 months postpartum. In this study, the percentage of women exceeding cut-offs for at least moderate depression ranged from 12% (at 12 months postpartum) to 14% (at late pregnancy), which is in accordance with the prevalence of antenatal and postnatal depression in the general population (approximately 13%; Milgrom, Ericksen, Negri, & Gemmill, 2005).

Our findings support previous research which has reported weight and shape body dissatisfaction remains stable or is reduced temporarily at some points in pregnancy (e.g., Clark & Ogden, 1999; Rocco et al., 2005; Rubin, 2006, Skouteris et al., 2005), despite the fact that women gain weight and hence move away from the societal ideal of thinness at this time (Thompson et al., 1999). One possible explanation for this finding is that pregnancy encourages women to recognise and appreciate the functionality of their body while discouraging self-objectification. Pregnancy may be a unique time for women during which gaining weight is acceptable. It has been argued that women are more likely to prioritise their own health and the health of their fetus at this time, over and above aesthetics (Rocco et al., 2005; Rubin, 2006).

The observed dissipation of feeling fat and salience of shape and weight for some women during pregnancy does not carry into the postpartum period, as results of this study and previous research suggest (Lombardo, 2001; McCarthy, 1999; Rallis et al.,

2007; Stein & Fairburn, 1996). This pattern may be due to women in the postpartum believing they no longer have an 'excuse' to be large (Rallis et al., 2007). Higher postpartum feeling fat and salience scores may also be related to unrealistic expectations that women have about the speed and ease by which their body will return to pre-pregnancy shape after giving birth.

The second aim in this study was to assess the relationship between depression and body dissatisfaction during pregnancy and the postpartum. Findings revealed positive relationships between depression scores and the Feeling Fat and Salience subscales of the Body Attitudes Questionnaire, and a negative relationship between depression scores and the Attractiveness and Strength and Fitness subscales. The association between depression and body dissatisfaction was stronger during the postpartum period than during pregnancy, possibly due to women describing the most body dissatisfaction (on all four subscales) at 6 weeks and 6 months postpartum.

In regards to the third aim, prospective findings supported a model of depression predicting body dissatisfaction, with late pregnancy depressive symptomatology predicting feeling fatter, less attractive and less strong and fit and weight and shape becoming more salient. Late pregnancy depressive symptomatology also predicted feeling fatter at 6 and 12 months postpartum. These findings accord with previous longitudinal research revealing that depressive symptoms predict body image disturbance (Keel, Mitchell, Davis, & Crow, 2000; Rallis et al., 2007; Skouteris et al., 2005) and are consistent with Beck et al.'s (1979) cognitive model of depression, as outlined in the Introduction here. It is possible that depressed individuals attend to negative body information such as body parts they dislike most, hence increasing

overall body dissatisfaction. Future research should examine further the mechanisms that might be responsible for this predictive relationship between depression and body dissatisfaction in childbearing women.

Numerous clinical implications arise from these findings. Considering that body dissatisfaction leads to dietary restraint and other potentially damaging weight loss behaviours (Wertheim, Koerner, & Paxton, 2001), it is especially important to help women with body concerns during pregnancy and the postpartum period to prevent possible weight-loss behaviours that may harm mother and/or baby. Given the relative stability of body image and depression over time, women with lesser well-being early in pregnancy may need additional support or intervention across pregnancy. In addition, an important time to prevent women from becoming dissatisfied with their bodies in the postpartum period may be during late pregnancy. At this time, it may help to screen for and treat depression in an attempt to decrease negative consequences of depression during pregnancy and the postpartum period. It may also be useful at this time to educate women about natural changes to the body after giving birth, for example, that one's stomach does not immediately return to pre-pregnancy shape and to challenge women's maladaptive cognitions related to body shape and weight (e.g., that being larger equals being unattractive) at this time. These interventions may further reduce levels of body dissatisfaction during the postpartum period, and could be explored in future research.

Limitations of the present study include the retrospective recall of pre-pregnancy information, which is difficult to avoid due to the uncertain timing of conception in non-pregnant women, and the general use of self-report measures.

Nonetheless, the self-report measures we used have been well validated, and data were obtained prospectively at five time points. Further, most participants were married, tertiary educated, and from middle or high income households, and hence replication with a more demographically diverse sample is warranted.

Findings of this study indicate that levels of body concerns remain relatively stable across pregnancy and the postpartum period so that the best indicators of body dissatisfaction or depressive symptoms during this time are prior levels of those concerns. Most women adapted well to the changes to their body during pregnancy (with some decrease in feeling fit and strong at early pregnancy), with a greater risk for body concerns arising early in the postpartum. All facets of body dissatisfaction measured in this study were associated with depressive symptomatology at each time point in pregnancy and the postpartum, however, the study's prospective design showed that depressive symptomatology during late pregnancy predicted body dissatisfaction across all domains at 6 weeks postpartum, as well as increases in feeling fat at 6 months and 12 months postpartum. Findings suggest that depression prospectively predicts later body dissatisfaction during the postpartum, rather than the reverse.

In closing, this is the first study to prospectively examine the relationship between depression and body dissatisfaction from early in pregnancy through to 12 months postpartum. There have been very few prospective studies of this nature conducted, and only one examining pregnancy. Indeed, none have examined this relationship over such an extended period of time looking at the transition from pregnancy to the postpartum period. Consequently, this study offers a more complete illustration of depression and body dissatisfaction over this time. The findings have

implications for body image theory and practice by assisting in the development of evidence-based models and related clinical interventions for promoting psychological well-being during the perinatal period.

Footnotes

1. Residual change scores for the BAQ, the BDI, and BMI were also examined, revealing significant correlations between change scores for the BDI and BAQ, indicating that an increase in depression over time was associated with an increase in body dissatisfaction over time, and vice versa. There was no correlation between change scores for the BAQ and BMI.
2. An all-inclusive correlation table reporting correlations and significant relationships prospectively across all time points is available from the authors on request.

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Table 1

Mean (and Standard Deviation in Parentheses) Scores for the BAQ Sub-scales, the BDI, and BMI at Each Time Point; Pre-pregnancy (3-months prior to pregnancy), PregT1 (17-21 weeks gestation), PregT2 (32-35 weeks gestation), PPT1 (6 weeks postpartum), PPT2 (6 months postpartum), PPT3 (12 months postpartum)

	Pre-pregnancy	PregT1	PregT2	PPT1	PPT2	PPT3
Feeling Fat	32.89 ^a	32.71 ^c	29.63 ^{bde}	36.34 ^{bd fg}	37.45 ^{bd fi}	35.47 ^{bd fhj}
(Range 12-59)	(10.19)	(10.77)	(9.70)	(11.27)	(11.97)	(12.16)
Attractiveness	18.01	17.55	17.67	17.90	17.39	17.72
(Range 6-25)	(2.89)	(3.31)	(3.45)	(3.50)	(3.68)	(3.51)
Salience	12.29 ^a	11.68 ^{bc}	10.34 ^{bde}	11.63 ^f	12.25 ^{fg}	11.66 ^{fh}
(Range 5-24)	(4.14)	(3.87)	(3.08)	(4.15)	(4.55)	(4.07)
Strength & Fitness	20.56 ^a	18.66 ^{bc}	19.26 ^{bde}	19.93 ^{df}	20.39 ^{df}	20.62 ^{df}
(Range 7-30)	(4.60)	(4.17)	(4.29)	(4.23)	(4.72)	(4.58)
BDI		3.15 ^a	3.96 ^{bc}	3.29 ^{de}	3.23 ^d	2.86 ^{bd f}
(Range 0-17)		(2.58)	(3.63)	(2.88)	(3.21)	(2.75)
BMI	23.76 ^a	25.54 ^{bc}	28.56 ^{bde}	25.35 ^{b fg}	24.66 ^{bd fhi}	24.09 ^{d fhj}
(Range 17.93-40.04)	(4.21)	(4.05)	(4.16)	(4.32)	4.38)	(4.36)

Note: Significant differences were found between variables labelled a compared to b, variables labelled c compared to d, variables labelled e compared to f, variables labelled g compared to h, and variables labelled i compared to j; $n = 116$

Table 2

Pearson Product-Moment Correlations between the BAQ Subscales and the BDI (Depress) at Each Time Point; PregT1 (17-21 weeks gestation), PregT2 (32-35 weeks gestation), PPT1 (6 weeks postpartum), PPT2 (6 months postpartum), PPT3 (12 months postpartum)²

	Depress PregT1	Depress PregT2	Depress PPT1	Depress PPT2	Depress PPT3
Feeling Fat	.34**	.31**	.43**	.38**	.39**
Attractiveness	-.36**	-.44**	-.44**	-.54**	-.46**
Saliency	.17	.23*	.42**	.36**	.37**
Strength	-.36**	-.30**	-.41**	-.35**	-.37**

Note: Correlations are concurrent correlations; i.e. Feeling Fat Preg T1 with Depress Preg

T1, Feeling Fat Preg T2 with Depress Preg T2 etc.

* $p < .05$, ** $p < .01$ two-tailed, $n=116$

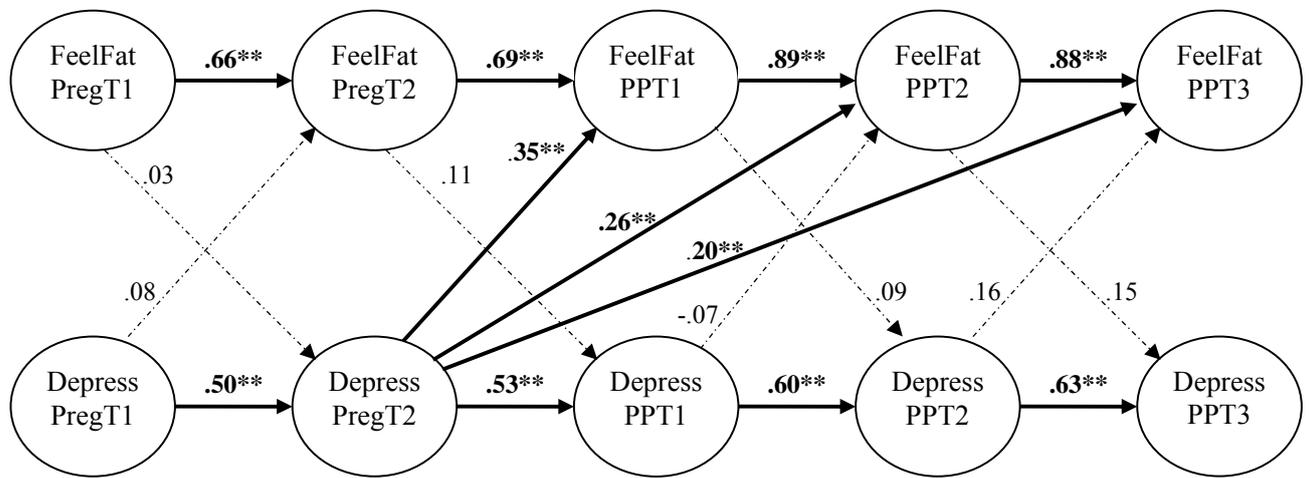


Figure 1

Partial correlations between BDI scores and the Feeling Fat subscale of the BAQ. For each correlation, the relevant variable at the immediately preceding time point is controlled for (i.e. in the partial correlation between BDI PregT1 and FF PregT2, FF PregT1 is controlled for etc.)

Note: Beta weights in bold font are significant at $**p < .01$

Dashed arrows indicate non-significant paths (beta weights in non bold font), and solid arrows indicate significant paths

PregT1 and PregT2= Pregnancy Time 1 and Time 2 respectively

PPT1-PPT3 = Postpartum Time 1 to Time 3 respectively

Depress = Depression (Beck Depression Inventory), FeelFat= BAQ Feeling Fat