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## **The construal of midwives by pregnant women with a body mass index greater than or equal to 30kg/m<sup>2</sup> (BMI≥30kg/m<sup>2</sup>): A Repertory Grid study**

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### **Abstract**

*Objective:* To explore the construal of midwives by pregnant women with a body mass index greater than 30kg/m<sup>2</sup> (BMI≥30kg/m<sup>2</sup>).

*Method:* Ten pregnant women with a BMI≥30kg/m<sup>2</sup> were recruited from antenatal clinics at a maternity hospital in the North West of England. Each participant completed a repertory grid. The participants chose people to match roles and these included themselves, pregnant women and midwives of different BMIs, alongside hypothetical elements, such as a pregnant celebrity, ideal midwife, ideal pregnant woman and ideal self. They also generated psychological constructs to describe them.

*Results:* Pregnant women with a BMI≥30kg/m<sup>2</sup> construed themselves as vulnerable and self-conscious. Some women endorsed obesity-related stereotypes for themselves, and felt responsible for their weight. The midwife with a BMI 18<30kg/m<sup>2</sup> was considered to be most similar to the ideal midwife, while the midwife with a BMI≤18kg/m<sup>2</sup> was construed as having an undesirable interpersonal style. The midwife with a BMI≥40kg/m<sup>2</sup> was often construed as sharing similar experiences to the pregnant women with a BMI≥30kg/m<sup>2</sup>, such as struggling with the psychological consequences of a raised BMI. Some women construed the midwife

with a BMI  $30 < 40 \text{ kg/m}^2$  in a positive way, whereas others viewed it as sharing similar feelings about weight as the midwife with a  $\text{BMI} \geq 40 \text{ kg/m}^2$ .

*Conclusions:* The pregnant women with a  $\text{BMI} \geq 30 \text{ kg/m}^2$  in this study described perceptions of themselves and the midwives responsible for their care, which may have a significant impact on their engagement and satisfaction with services. Pregnant women with a  $\text{BMI} \geq 30 \text{ kg/m}^2$  should be involved in service development activities to ensure the structure of services and the language used by midwives are acceptable and do not confirm commonly held weight-related stereotypes.

*Keywords:* Body Mass Index; Midwives; Pregnancy; Repertory grid technique; Women.

Key practitioner message:

- Pregnant women with a  $\text{BMI} \geq 30 \text{ kg/m}^2$  construe themselves as vulnerable and self-conscious and perceive themselves responsible for their weight.
- Pregnant women with a  $\text{BMI} \geq 30 \text{ kg/m}^2$  construe midwives with a low BMI as having an undesirable, cold, interpersonal style.
- Midwives with a raised BMI are construed as similar to the women, because they share the uncomfortable psychological consequences of a raised BMI.
- The nature of pregnant women's construal may affect their engagement and satisfaction with maternity services and midwifery care.



## **Introduction**

Obesity is one of the most frequently occurring risk factors affecting women during pregnancy (Royal College of Obstetrics and Gynaecologists, 2010) with over 15% of pregnant women being recorded as obese - a figure which increases annually (Heslehurst, Rankin, Wilkinson & Summerbell, 2010). Maternal obesity, defined as a body mass index greater than or equal to  $30\text{kg/m}^2$  ( $\text{BMI} \geq 30 \text{ kg/m}^2$ ), increases the risk of complications including pre-eclampsia, gestational diabetes mellitus, induction of labour, emergency caesarean section and haemorrhage (Sebire et al, 2001). These complications mean some women require doctor-led care, longer inpatient stays, and additional medical intervention (Heslehurst et al, 2008), which in itself sets this group of women apart from those with a lower BMI, reflecting the psychological distance and stigma in society (Puhl & Heuer, 2009). Societal weight stigma is pervasive and has a notable impact on employment settings, peer relationships and media portrayal (Mold & Forbes, 2013; Puhl & Brownell, 2004; Puhl & Heuer, 2009). Individuals with a  $\text{BMI} \geq 30\text{kg/m}^2$  report a culture of blame exacerbated by public health campaigns and the media (Thomas, Hyde, Karunaratne, Herbe, & Komesaroff, 2008), resulting having a raised BMI being associated with poorer emotional wellbeing (Jorm et al, 2003).

This culture is also evident in health care settings (Mold & Forbes, 2013, Puhl & Brownell, 2003). Women with a raised BMI report being depersonalised by their medical care and perceived their own wellbeing to being disregarded in comparison to that of their fetus (Smith & Lavender, 2011). Furthermore, they did not feel that the additional medical care they received was accompanied by sufficient explanation about their pregnancy, which for some was anxiety provoking (Furber & McGowan, 2011), but led others to feel that their  $\text{BMI} \geq 30\text{kg/m}^2$  was acceptable (Smith & Lavender, 2011). Pregnant women with a  $\text{BMI} \geq 30 \text{ kg/m}^2$  also reported discrimination by health professionals; they also experienced feelings of

guilt and humiliation because they believed they were treated with sarcasm and suspicion (Furber & McGowan, 2011; Mulherin, Miller, Barlow, Diedrichs & Thompson, 2013; Smith & Lavender, 2011), perceiving health professionals blamed them for their gestational weight gain (Furber & McGowan, 2011). One study found a small number of women had a positive experience of a specialist antenatal clinic, finding health professionals to be more supportive and to have a clearer focus on their weight-related issues (Furness et al, 2011). Pregnant women with a negative experience of healthcare may be less likely to follow professional advice (Vermeire, Hearnshaw, van Royen & Denekens, 2001; Weisman & Koch, 1989).

There has been a drive to develop specific services for pregnant women with a BMI  $\geq 30 \text{ kg/m}^2$ , yielding mixed results in terms of their outcomes (Campbell, Johnson, Messina, Guillaume & Goyder, 2011). Currently, there are few indicators as to the way pregnant women with a BMI  $\geq 30 \text{ kg/m}^2$  receive these services, confirming the importance of identifying and incorporating the views of this group of women in service design (Heslehurst et al, 2013). The current study uses the repertory grid technique to contribute to this goal.

The repertory grid technique is grounded in personal construct theory (Kelly, 1955), which regards individuals as acting as scientists, actively forming mental representations of others (*elements*) based on their experiences (*construing*). These mental representations (*constructs*) act as a framework by which the person predicts other people's actions and intentions and decides how to act themselves, indicating how experience may influence future interactions (Kelly, 1955). Repertory grids provide a method to elucidate these views in the participant's idiosyncratic language, minimising the impact of social desirability bias (Jankowicz, 2005).

Repertory grids have been used within a midwifery setting, for example, to identify the way in which Maltese women judged maternity services, identifying a range of attributes employed by women during and after pregnancy (Callaja & Gauci, 1999). Women construed

services according to reliability, responsiveness, competence, access, courtesy, communication, credibility, security, relationship, tangibles, control, cost, naturalness and quality. Repertory grids have also been used to consider the transition to motherhood (Smith, 1990) and representations around women's sex preference for their baby (Marleau, Saucier, Borgeat, Bernazzani & David, 1996; Marleau, Saucier, Bernazzani, Borgeati & David, 1997). Within obesity research, repertory grids have been used with women with a raised BMI to understand the semantics of power and control (Faccio et al, 2012), finding that constructs relating to power were more frequently reported as more important than for women with a BMI  $<26\text{kg/m}^2$ . Within the current study, repertory grids will allow exploration as to whether pregnant women with a BMI  $\geq30\text{kg/m}^2$  endorse similar constructs in order to determine their perception and satisfaction with midwifery care. The aims of the current study were twofold: (1) to explore the way in which pregnant women with a BMI  $\geq30\text{ kg/m}^2$  construe themselves, other pregnant women, and midwives and (2) to use this information to reflect on ways in which women's construal may affect their engagement with midwifery care.

## **Methodology**

### *Participants*

Ten pregnant women were recruited through convenience sampling from antenatal clinics in an inner city National Health Service (NHS) hospital in the North West of England. Women were recruited during their antenatal booking appointments, at a specialist clinic for pregnant women with a BMI  $\geq40\text{kg/m}^2$ , or their antenatal clinic. Pregnant women were invited to participate in the study if they had a current BMI  $\geq30\text{kg/m}^2$  (as recorded in their medical notes), were over 18 years of age, and had sufficient English to fully understand the study details, provide informed consent and participate in the interview. Women were recruited at

any gestation as long as they had experience of meeting with midwives during the current pregnancy. Although small, this sample size has been considered to be appropriate for repertory grid studies of a similar nature (e.g., Blundell, Wittkowski, Wieck & Hare, 2012). Approval was granted by the Greater Manchester South Ethics Committee (reference number 12/NW/0878), the local Research and Development Department (R03113), and the University of Manchester Research Ethics Committee.

#### *Data Collection*

Repertory grids (Fransella, Bell & Bannister, 2004; Kelly, 1955) were completed with each participant in an audio-recorded, semi-structured interview. The following role titles were presented to the participants: 1) *pregnant woman with a BMI 18<30kg/m<sup>2</sup>*, 2) *midwife with a BMI 18<30kg/m<sup>2</sup>*, 3) *pregnant woman with a BMI 30<40kg/m<sup>2</sup>*, 4) *midwife with a BMI 30<40kg/m<sup>2</sup>*, 5) *pregnant woman with a BMI ≥40kg/m<sup>2</sup>*, 6) *midwife with a BMI ≥40kg/m<sup>2</sup>*, 7) *pregnant woman with a BMI <18kg/m<sup>2</sup>*, 8) *midwife with a BMI <18kg/m<sup>2</sup>*, 9) *pregnant celebrity*, 10) *self*, 11) *ideal self*, 12) *ideal midwife*, and 13) *ideal pregnant woman*.

The ideal elements were included to both demonstrate the preferred pole of the constructs, as well as to determine whether the pregnant women desired the elements to have characteristics other than those they identified in the people they selected to fit the role titles. The pregnant celebrity element was included to illustrate whether there was an impact of media portrayal that might affect women's perceptions of their body image. Participants were asked to identify people they had known well within the last six months who corresponded to these roles. Silhouette images of women across the BMI range were shown to the participants to support their selection (Bulik et al, 2001).

Constructs were generated using the triadic difference method (Bjorklund, 2008; Hagans, Neimeyer & Goodholm, 2000; Neimeyer & Hagans, 2002): participants were given

three elements selected using partial randomisation and asked questions in order to yield a bipolar construct (e.g., “*What psychological characteristic makes two of these elements similar to each other? How is the third element different?*”). Behavioural examples were elicited for each pole of the construct to identify the specific meaning behind it (“*Can you give me an example of how someone with that characteristic might behave?*”). This process was repeated until at least ten bipolar constructs or no further sufficiently different constructs had been generated. Every element was used at least once. The elements were then ranked along each bipolar construct and the preferred pole was specified (“*From this list of elements, who is the most x, now who is the next most like that, etc. In your opinion is it better to be x or y?*”). Each participant also completed a brief demographic questionnaire.

Following analysis and interpretation of the data (see below for more detail), participants were revisited and shown a visual representation (PrinGrid) of their repertory grid. This PrinGrid allows the nature of each participant’s construing to be plotted on a two-dimensional grid through principal components analysis of the raw data, which permits the clear visual identification of elements that are construed similarly or differently. The process of the interview and the findings were discussed in order to share with the participant the findings and interpretation of her individual grid, and determine whether there were any factors that might affect the interpretation; for example, were they able to be open and honest in the interview or did they find it challenging to complete. The participants were also asked to consider if they believed the results to be an accurate representation of their views (Fransella et al, 2004).

#### *Data Analysis*

Each repertory grid was analysed using Rep IV (Gaines & Shaw, 2005). Grids were examined visually by the principle researcher (EH) to determine the nature of the constructs

generated. Hierarchical cluster analysis was used to identify similarities within the different elements and constructs for each participant. Significant associations between the elements were identified using the same method, using a power of 2.0 to define a Euclidean metric (Gaines & Shaw, 2005). The Euclidean distance is the geometrical distance between the elements that can be considered as an analogue of the psychological distance between them. The smaller the Euclidian distance, the more psychologically similar the elements can be considered to be. Principal components analysis was used to explore the relationships within and between the elements and constructs in an individual's repertory grid in order to visually represent the data in a two-dimensional PrinGrid (Gaines & Shaw, 2005), which allowed for the examination of the relationships between constructs and elements.

## Results

### *Participant Characteristics*

A convenience sample of ten pregnant women with a BMI  $\geq 30\text{kg/m}^2$  was recruited from a large city centre hospital. Three participants were reported to have a BMI of 30-40  $\text{kg/m}^2$ , and six had a BMI  $\geq 40\text{kg/m}^2$  (average BMI 40). Two participants did not state their BMI but their midwives confirmed that they met inclusion criteria from their medical notes. BMI as documented in the participants' medical notes was used, which could be self-reported or assessed by midwives. Five of the women described this as their first pregnancy, three as their second pregnancy, and two as their third or fourth pregnancy); eight pregnancies (80%) were described as planned. Seventy percent of the participants described themselves as White British, two as African and one as White non-British, The participants were interviewed between 11 and 38 weeks gestation (average 25 weeks).

### *Repertory Grid Characteristics*

**Commented [AW1]:** Emma – reviewer 2 requestd more demographic information – could you provide this please from your past emails????

**Commented [E2]:** This is all the demographic info I've got – I cant get access to those emails anymore

All participants produced a minimum of 10 constructs, with one (P1) producing 12 constructs and one (P9) producing 11 constructs (P9). Only two participants were able to identify elements for every role title, with the remaining nine participants creating four (P10), three (P1), two (P2, P4, P5), or one (P6, P7, P8) hypothetical elements. Hypothetical elements were used if the participant was not able to identify a specific person to match the role title; for example, if they had never met a midwife with a  $BMI > 18\text{kg/m}^2$  they were asked: “*Could you imagine what a midwife with this BMI might be like and how you might feel to be with them?*” The analysis process highlighted the individual nature of each participant’s repertory grid, and therefore the uniqueness of their construing. Two randomly selected PrinGrids are presented in Figures 1 and 2 as examples.

The following sections describe the participants’ results and interpretation.

#### INSERT FIGURES 1 AND 2 HERE

#### *Participant Validation*

Six participants received feedback of their PinGrid during their follow up interview (four participants were lost to follow up). They described the process as interesting and noted it was helpful to view their construing as a visual representation. Some participants had delivered their baby by the time of the feedback interview and stated that their construal of themselves had changed significantly as a result of no longer being pregnant.

Commented [DS3]: Does this need to be here or can it feature in the method?

#### *Self, Ideal Self and the Ideal Pregnant Woman*

There was considerable variation between how the participants’ construed themselves in relation to their *ideal self*. Four participants (P5, P7, P8, P10) construed themselves as having “high self-esteem”, being “relaxed”, “confident”, “joyful”, “honest”, and “finding it

easy to adjust to pregnancy-related changes” and “talk about weight”. Hierarchical cluster analysis revealed smaller Euclidean distances between the *self* and *ideal self* for these participants, suggesting that these elements were construed as being psychologically similar. Examination of the grids for the other six participants indicated differences in the *self* and *ideal self* were construed, with the former construed as “worried”, “self-conscious” and “unhappy”.

With respect to what factors were construed as being characteristic of raised BMI, all of the participants selected internal as opposed to external factors, using labels including ‘careless’, ‘self-indulgent’, ‘less health conscious’, ‘weak’ and ‘stupid’, suggesting they felt responsible for their raised BMI. Participant P4, who generated the construct *self-indulgent—doesn’t actively seek comfort*, stated that she felt uncomfortable using this language to describe herself, which echoed a concern expressed during the initial interview by several participants that they wanted to find the correct word to describe their intuition but did not always agree with the words they chose.

The participants consistently construed the *ideal pregnant woman* as similar to their *ideal self*. There was notable variation in the psychological similarity of the *ideal pregnant woman* compared to the other elements relating to pregnant women. Seven participants construed the *ideal pregnant woman* as most similar to the *pregnant woman with a BMI 18-30kg/m<sup>2</sup>* (Euclidean distance 6.86 to 15.36). Each of the three remaining participants construed the *ideal pregnant woman* as most similar to the *pregnant women with a BMI≤18kg/m<sup>2</sup>* (P2), *pregnant women with a BMI 30-40kg/m<sup>2</sup>* (P5) and *pregnant women with a BMI≥40kg/m<sup>2</sup>* (P7).

The participants construed the midwife elements in a variety of ways. Three participants (P6, P7, P10) clustered the elements relating to midwives together and then construed them based on their role, rather than their BMI. Four participants (P3, P4, P5, P8) conversely clustered the midwife-related elements based on BMI but, in the case of three participants (P1, P2, P9) the pattern of their construing was less clear. Participants consistently construed the *ideal midwife* as someone who was confident, outgoing, caring, patient, concerned but not anxious, compassionate and non-judgemental. One participant (P4) noted the *ideal midwife* would also be someone who “practiced what they preached”, discussing this in the context of weight-related behaviours and BMI: “*It's being in the healthy range, it's about being hypocritical, being healthy and advising people*”. This comment suggests that it would be more difficult for her to take weight-related advice from midwives who did not appear to follow this advice themselves. However, P3 stated “*as long as she knew what she was doing it [BMI] wouldn't make a difference to me*”.

Participants’ construal of the other elements relating to midwives was more varied, with seven participants construing a *midwife with a BMI≤18kg/m<sup>2</sup>* as someone with an unfavourable and unapproachable interpersonal style, with construct labels including “solemn”, “arrogant”, “strict”, “not understanding”, “quiet”, “judgemental”, “under scrutiny”, and “self-focusing” (P1, P3, P4, P5, P8, P10). The other participants construed this element as “confident” and “relaxed”(P2, P6) or not weight-conscious (P7). Only one participant (P2) construed this element similarly to the *ideal midwife*, with five participants (P1, P4, P5, P9, P10) construing it as least like the *ideal midwife*.

Similarly, it was noted that the construal of the *midwife with a BMI≥40kg/m<sup>2</sup>* was also largely negative, with only two participants construing it in a positive way (P7, P9). Along with reference to their feelings about their own bodies, much of the construing referenced attributions for their weight-related behaviours. Some pregnant women construed this

midwife as vulnerable and self-neglecting, using construct labels such as “worried”, “anxious”, “stressed”, “self-indulgent”, and “lazy” (P1, P2, P4, P5, P6, P8, P10). One participant construed the *midwife with a BMI $\geq 40\text{kg}/\text{m}^2$*  as feeling judged by others. Three participants construed this element as least like the *ideal midwife* (P2, P3, P6), whereas two felt it to be most like the *ideal midwife* (P7, P9).

The grids show that the *midwife with a BMI 18<30kg/m<sup>2</sup>* was construed more positively than the *midwife with a BMI $\leq 18\text{kg}/\text{m}^2$*  and *midwife with a BMI $\geq 40\text{kg}/\text{m}^2$* . An ANOVA of the Euclidean distances between the *ideal midwife* and the other elements pertaining to midwives suggests this is only a trend in the data rather than a statistically significant finding ( $F(3,35) = 2.87, p=0.12$ ). Seven participants (P1, P3, P4, P6, P7, P8, P10) construed the *midwife with a BMI 18<30kg/m<sup>2</sup>* as having similar characteristics to the *ideal midwife*, with six of these construing this element as most similar to the *ideal midwife*. Two participants construed this element more negatively and as being solemn, uptight, worried and low in confidence. The construal of a *midwife with a BMI 30-40kg/m<sup>2</sup>* was equally mixed, falling at the positive pole (P5, P7, P8), negative pole (P1, P2, P3, P4, P10) or in the middle of the bipolar constructs (i.e. ranked 6 or 7 out of 13; P6, P9). One participant construed this element as most like the ideal midwife (P5).

During the repertory grid interview ,one participant explicitly commented on her experience of discussing weight with midwives, believing that discussing weight-management was not the midwives’ role, and that when they did discuss it, they felt uncomfortable: “*Maybe they feel like, erm, when they talk about it the patient might feel uncomfortable* ”.

## Discussion

Commented [DH4]: Absolutely fine

Commented [DH5]: Use the Euclidean distances and do a t-test

Commented [E6]: I've done an ANOVA across all the midwife elements, I hope this is correct.

Commented [AW7]: Reviewer 1 had a question about this and Emma suggested she could add a table in.

Dougal – could you advise on this please?

This study explored the construal of midwives by pregnant women with a raised BMI, demonstrating the idiosyncratic ways in which pregnant women evaluate the midwives that provided their care. According to Kelly's (1955) construction corollary, participants use these construct systems to anticipate future interactions, implying that the pregnant women's past experiences influence subsequent interactions.

Only a minority of participants explicitly articulated their views regarding their perceived 'ideal BMI' of the ideal midwife and tended to take one of two conflicting positions. Some women found it more difficult to accept weight-related advice from midwives whom they felt did not follow it themselves. In contrast, the others took the line that as long as the midwife was good at her job, her BMI was irrelevant. For the remaining participants, the ideal midwife was most similar to the *midwife with a BMI 18-30kg/m<sup>2</sup>*, free from the negative psychological sequelae of a raised BMI, although this was not explicitly expressed. The construal of midwives with either a very low or very high BMI was unfavourable, with some participants seemingly endorsing socially recognised stereotypes, such as less interpersonal warmth (*midwives with a BMI≤18kg/m<sup>2</sup>*) or anxious and lacking self-confidence (*midwives with a BMI≥40kg/m<sup>2</sup>*). These constructs were almost entirely based on internal characteristics, reflecting existing research that society views weight-related issues as a personal shortcoming (Klaczynski, Goold & Mudry, 2004), and weight-loss as the responsibility of the individual (Thomas et al, 2008). Therefore, pregnant women may not fully accept advice given by a midwife whose BMI is perceived to be outside the recommended range of 18-30kg/m<sup>2</sup>, meaning that opportunities to support women in adopting healthy weight-related behaviours may be missed. However, pregnant women also identified sharing characteristics with midwives with a  $BMI \geq 40\text{kg}/m^2$ : they may feel that they share characteristics with midwives perceived to have same BMI, but they may also recognise these same characteristics to act as a barrier to their support.

Commented [DH8]: quantify

Commented [E9]: I don't think I can quantify this – it was something I noticed during the interviews and I don't have the transcripts anymore to go through and check numbers. The transcripts will be with the rest of the data if you think its important to add it in.

A number of the pregnant women valued midwives who were open and honest about weight-related issues. Existing evidence states that midwives are aware this is necessary, but nonetheless feel uncomfortable and deskilled in having these conversations (Heslehurst et al, 2011; Smith, Cooke & Lavender, 2012). This discomfort had been noticed by one of the participants, highlighting that midwives should be aware that their own concerns about discussing weight-related issues are observable and that these may be misinterpreted as unsupportive or judgemental.

The pregnant women sampled construed themselves as unlike their ideal self, which is important as discrepancy of this magnitude between self-states is associated with low self-esteem, dejection and despair (Higgins, Klein & Strauan, 1985). For some women, their construal of themselves reflected obesity-related stereotypes of laziness, poor self-control, and self-indulgence (Furber& McGowan, 2011; Mulherin et al, 2013). These same women had experienced midwives as judgemental and arrogant, adding to existing evidence that pregnant women with a  $BMI \geq 30\text{kg}/\text{m}^2$  perceive discrimination within the healthcare system (Mold & Forbes, 2013). Furthermore, these constructs are comparable to themes of lack of control and power identified by previous repertory grid studies with obese women (Faccio, Belloni & Catellnuovo, 2012). These constructs may influence women's engagement with midwifery care and therefore the management of weight-related complications (Cameron, 1996; Goold & Lipkin, 1999). It is known that a lack of self-efficacy and perceived self-control decreases the likelihood that women will modify their weight-related behaviours (Shin et al, 2011). Therefore, while pregnancy is known to be a "teachable moment" in terms of delivering weight management advice (Phelan, 2010), it may not be the case for women with a  $BMI \geq 30\text{kg}/\text{m}^2$  who feel judged and lacking in the confidence to make the required changes. In their interactions with midwives, these women may appear defensive or defeated, possibly causing their own perceptions of midwives' weight-related attitudes to

become self-fulfilling. Further research is required to explicitly explore the impact of women's construal on the interactions with health professionals, pregnancy outcomes and postpartum weight behaviours.

Some of the women had given birth by the time of the feedback interview; they noted that their construal of their pregnant self differed from their postpartum self. It may be that the women felt less vulnerable, less reliant and more independent than when they were pregnant, moving their self closer to the ideal. Alternatively, it is possible women were less accepting of their increased BMI postpartum than in pregnancy, increasing the psychological distance between their self and ideal self. Both of these explanations confirm that pregnancy and the postpartum phase are valuable opportunities to motivate women to engage in healthy weight-related behaviours (Phelan, 2010).

These findings confirm existing research that pregnant women with a  $BMI \geq 30\text{kg}/\text{m}^2$  should be consulted as to the nature of midwifery care (Heslehurst et al, 2013). Service user involvement has a strong agenda within the NHS, and has a valuable role in identifying specific concerns that might otherwise be unrecognised (Smith et al, 2008). However, in reality it is possible that it may not always translate into actual service change (Fudge, Wolfe & McKevitt, 2008). Within the context of maternal obesity, service user involvement could inform a number of issues making services more acceptable to women to improve engagement and service satisfaction. For example, service user research in this area could identify a "dictionary" of preferable weight-related terms enabling women to feel less judged during weight-related conversations.

Although these women identify more with midwives with a raised BMI, their perception of a shared anxiety and fear of judgement may cause the midwife to feel like they have to justify their skills, possibly reducing the women's confidence in them. Furthermore, the greater psychological distance between pregnant women with a raised BMI and midwives

with a lower BMI means more effort is required to develop the relationship. These two findings raise the issue as to whether women with a  $\text{BMI} \geq 30\text{kg/m}^2$  would prefer to have a specialist midwife or specialist clinic focused on BMI. A perception of a specialist skill set may increase women's confidence in their midwife irrespective of their BMI, and provide an opportunity to develop an on-going therapeutic relationship.

The nature of the technique and the current sample size mean that the findings are illustrative rather than being generalisable. Furthermore, it is acknowledged that the elements presented across a range of BMI categories may have shaped the constructs the participants produced in order to answer the aims of this study. Finally, the study demonstrates the nature of women's construing from which tentative suggestions can be drawn about their interactions with midwifery services. However, further research would be needed to draw a comprehensive understanding of the link between women's construing, their behaviour and interaction with midwives. Future research should also explore direction and magnitude of change in

women's construal.

## Conclusion

The views of a group of pregnant women with a  $\text{BMI} \geq 30\text{kg/m}^2$  reflect a culture of self-blame with respect to their BMI. These women construed themselves as more worried and anxious than those with a lower BMI, and perceive themselves to be judged by others. They valued midwives who were supportive and accepting of their weight, and explained this did not always happen. In particular, midwives with a very low BMI were perceived to have a less warm, interpersonal style, whereas those with a raised BMI were perceived to be vulnerable and self-neglecting. There was variation in the women's construing; with some highlighting that the midwives' BMI was not relevant as long as they were competent, and others identifying that their ideal midwife would have a BMI of  $18\text{-}30\text{kg/m}^2$ . The views of this

Commented [DS10]: yes

Commented [AW11]: I added this. Are people happy with this?

Commented [E12]: yes

group of women should be sought as part of service development to increase engagement and satisfaction with the service.

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### **Figure Captions**

Figure 1: PrinGrid from P4. A visual representation of the principal components analysis of the data from P4's repertory grid, showing the clustering of the different constructs and the positioning of each element across the constructs.

Figure 2: PrinGrid from P6. A visual representation of the principal components analysis of the data from P6's repertory grid, showing the clustering of the different constructs and the positioning of each element across the constructs.

Figure 1: PrinGrid from P4. A visual representation of the principal components analysis of the data from P4's repertory grid, showing the clustering of the different constructs and the positioning of each element across the constructs.

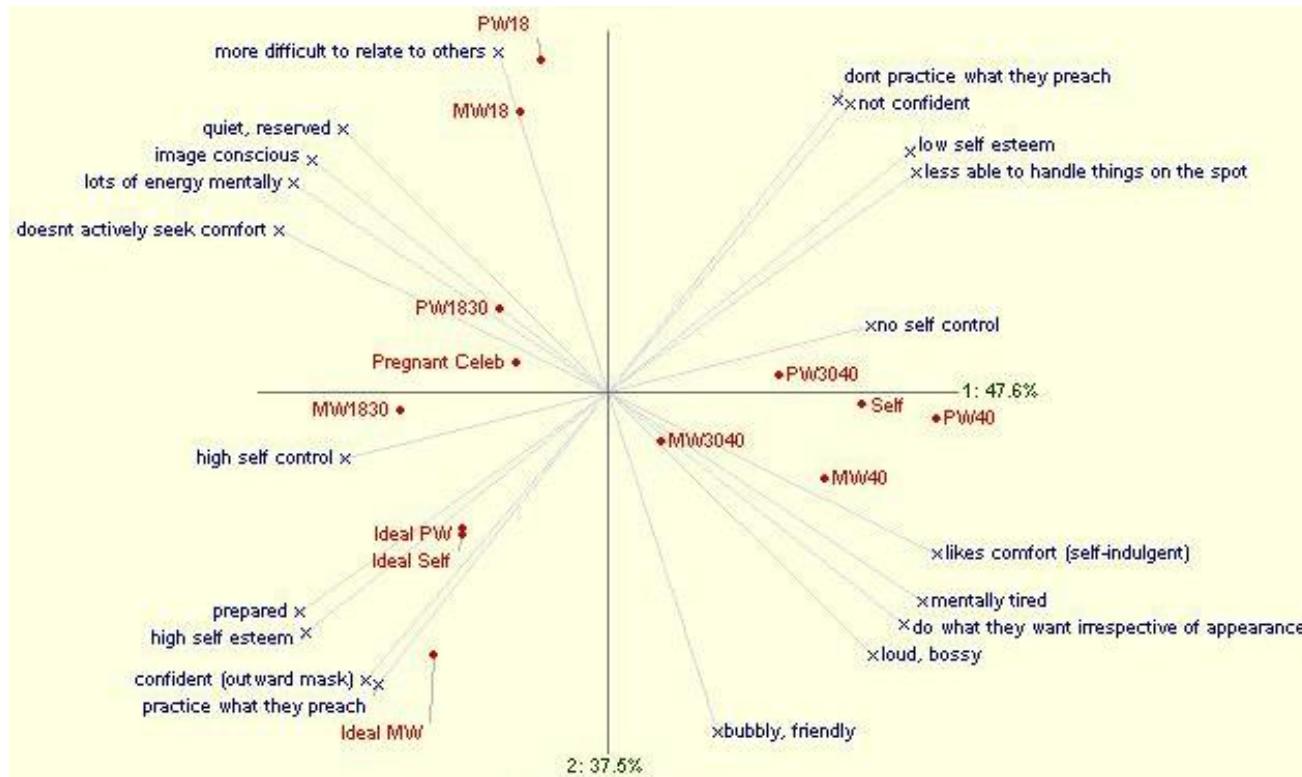


Figure 2: PrinGrid from P6. A visual representation of the principal components analysis of the data from P6's repertory grid, showing the clustering of the different constructs and the positioning of each element across the constructs.

