PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Healthcare professionals' and mothers' knowledge of, attitudes to, and experiences with, Baby-Led Weaning: a content analysis study
AUTHORS	Cameron, Sonya; Heath, Anne-Louise; Taylor, Rachael

VERSION 1 - REVIEW

REVIEWER	Dr Kate Harvey, PhD, CPsychol. Lecturer Department of Psychology The University of Reading Whiteknights, PO Box 238 Reading, Berks, RG6 6AL UK
REVIEW RETURNED	03-Jul-2012

THE STUDY	Some of these questions do not apply to qualitative research. 1. The authors describe Baby-Led Weaning (BLW) in just one brief sentence (line 96-97). Greater detail about BLW would be useful, especially some consideration of whether BLW is truly distinct from more traditional methods, or whether in practice it exists on a continuum. This would then enable them reflect more deeply on their own data in the discussion, in particular whether their mothers practiced BLW as described by Rapley. 2. The authors acknowledge that the sample is self-selected and likely to be limited to mothers who had success with BLW. Qualitative approaches do not seek to generalise to a population, and so this lack of representativeness is acceptable, however the authors should make some changes in light of this. a) The title should reflect the nature of the sample more accurately; participants were mothers who chose to use BLW (not, as it implies, parents generally). b) More detail is needed about the sampling methods so that they can be judged, for example was it more than one parenting group; did the recruitment methods encourage all parents who had tried BLW to participate, or just those who had been successful; what was the starting point for the snowballing; why was it that only mothers responded (and not fathers)? In relation to the last point, the text throughout the document needs to be changed to reflect the fact participants were mothers and not parents. c) The authors should comment on the fact that all of their sample of mothers had breastfed their infant up to the age of 5.5-6. In the UK the proportion of mothers who do this is very low, and I doubt it is 100% in NZ.
RESULTS & CONCLUSIONS	3. It is unclear from the methods and results section quite how the authors have handled the data. "Not knowing what foods to offer" and "iron-intake" is incorporated within attitudes towards BLW, when

	it would seem more logical to consider it part of knowledge. Similarly, is concern about choking best described as an attitude? The authors need to provide more detail about how data was handled in the methods section, and in the results section describe what main themes emerged for each of the participant groups (this should be data-driven, not imposed by them), and what sub-themes they comprise. 4. In the paragraph starting on line 224, the authors describe two developmental advantages of BLW. Evidence, in the form of illustrative quotes, needs to be provided to demonstrate that these emerged from the data. 5. It would be helpful to allocate the healthcare professionals ID numbers, in the way that mothers have been. As it stands, it is not possible for the reader to establish whether the quotes about choking are drawn from just two participants' interviews or five. 6. The authors rarely give consideration to contradictory views. Were there any? 7. It would seem more logical to incorporate the healthcare professionals' experiences of BLW into the knowledge section (see comment 3 above), and it is unclear why this data is presented in a table.
GENERAL COMMENTS	This is a good study, of relevance and interest. It is the reporting that needs revision, in particular the results section.

REVIEWER	Townsend, Ellen University of Nottingham, School of Psychology
REVIEW RETURNED	19-Jul-2012

GENERAL COMMENTS	It is interesting that BLW is seen as an 'alternative' approach in NZ. It is here too, despite the fact that it is compatible with current NHS advice in the UK which is to introduce finger foods from 6 months. It should be noted that BLW guidelines suggest avoiding pieces of hard fruit like apple to start with - especially if cut into small pieces. The authors explain why they chose the methodology used here - why a semi-structured interview? It would have been more reassuring to have seen some blinded reliability analysis conducted on the themes (rather than just a verification process). Can the authors justify their approach? It is very concerning that only half of the professionals had heard of BLW, even more worrying though was the fact that some were concerned about the introduction of finger foods at 6 months. This is a current recommendation in the UK. It would be useful to know what the guidance is in relation to finger foods in NZ. I wonder whether some parents in the sample did not understand the difference between gagging and choking (since the 'choking' experiences reported were not serious). A line should be added about this somewhere. Would it be useful to discuss what iron levels are needed, when and what evidence base supports this? To my knowledge the recommendations for paediatric nutrition levels are not supported by a strong evidence base. I would like to see something about this in the discussion since it was such a strong theme from the

	professionals. I think it is misleading to focus on the small number of underweight children I our study. Most children in both groups were of a healthy weight. A line should be added somewhere about this.

VERSION 1 – AUTHOR RESPONSE

Reviewer #1 (Remarks to the Author):

1. The authors describe Baby-Led Weaning (BLW) in just one brief sentence (line 96-97). Greater detail about BLW would be useful, especially some consideration of whether BLW is truly distinct from more traditional methods, or whether in practice it exists on a continuum. This would then enable them reflect more deeply on their own data in the discussion, in particular whether their mothers practiced BLW as described by Rapley.

Further detail on BLW has been added as requested (Introduction page 4, lines 99 - 107 and Discussion page 19, lines 525 - 530).

2. The authors acknowledge that the sample is self-selected and likely to be limited to mothers who had success with BLW. Qualitative approaches do not seek to generalise to a population, and so this lack of representativeness is acceptable, however the authors should make some changes in light of this.

Although qualitative research does not aim to be representative, we did attempt to achieve some degree of representativeness to strengthen the validity of our analysis. We have added lines 636-649 on page 22 in response to this comment.

a) The title should reflect the nature of the sample more accurately; participants were mothers who chose to use BLW (not, as it implies, parents generally).

We have amended the title accordingly.

b) More detail is needed about the sampling methods so that they can be judged, for example; (1) was it more than one parenting group; (2) did the recruitment methods encourage all parents who had tried BLW to participate, or just those who had been successful; (3) what was the starting point for the snowballing; (4) why was it that only mothers responded (and not fathers)? (5) In relation to the last point, the text throughout the document needs to be changed to reflect the fact participants were mothers and not parents.

As now outlined in the revised manuscript (page 5, lines 141 - 145), many parenting groups were attended to recruit participants; these small groups are reasonably common in Dunedin. Some mothers were recruited directly from a parenting group, however parenting group members were also the starting point for snowballing. Although we did not collect data on why only mothers responded, it is uncommon for fathers to be at home in New Zealand, especially when infants are very young i.e. around the time of starting solids. ‘Parents’ have been changed to ‘mothers’ throughout the document.

c) The authors should comment on the fact that all of their sample of mothers had breastfed their infant up to the age of 5.5-6. In the UK the proportion of mothers who do this is very low, and I doubt it is 100% in NZ.

We acknowledge the reviewer's point and agree that is it uncommon for mothers to exclusively breastfeed to 5.5-6 months in New Zealand (current rate of exclusive breastfeeding at 6-months is 16%). Unfortunately, few data are available internationally on breastfeeding practices in mothers following BLW. However limited evidence to date does suggest a longer duration of breastfeeding in this group (see Brown and Lee Matern Child Health J 2011;7(1):34-47).

3. It is unclear from the methods and results section quite how the authors have handled the data. "Not knowing what foods to offer" and "iron-intake" is incorporated within attitudes towards BLW, when it would seem more logical to consider it part of knowledge. Similarly, is concern about choking best described as an attitude? The authors need to provide more detail about how data was handled in the methods section, and in the results section describe what main themes emerged for each of the participant groups (this should be data-driven, not imposed by them), and what sub-themes they comprise.

We have added more detail about data handling as requested (page 7, lines 175-186), although this is necessarily brief due to space restrictions.

We would prefer to keep "not knowing what foods to offer" and "iron intake" under "Attitudes". The sub-categories "not knowing what foods to offer" and "iron intake" were raised as concerns and so shaped the mother's attitude toward BLW, whereas "Knowledge" was directly related to knowledge of the method of BLW.

"Iron intake" shaped both the mothers' and healthcare professionals' attitudes toward BLW, but quite differently for the two groups. Because mothers felt their infant was able to get enough iron from breast milk their attitude was more positive to BLW, whereas healthcare professionals considered that iron intake (without baby rice cereal) would be very low and would put the infant at risk of poor health outcomes, so their attitude to BLW was less positive.

4. In the paragraph starting on line 224, the authors describe two developmental advantages of BLW. Evidence, in the form of illustrative quotes, needs to be provided to demonstrate that these emerged from the data.

We have added two quotes that provide evidence for the developmental advantages reported by healthcare professionals:

Page 10, lines 259-262 "the BLW method could have real advantages for coping with food and learning to eat i.e for oral development. If babies are fed purées for too long they miss important windows for introducing different food textures" (Speech-Language Therapist 1)

Page 10, lines 264 - 265 "There must be some sort of fine motor benefits for baby being able to play, essentially, with its food" (General Practioner 5)

5. It would be helpful to allocate the healthcare professionals ID numbers, in the way that mothers have been. As it stands, it is not possible for the reader to establish whether the quotes about choking are drawn from just two participants' interviews or five.

We agree and have made the suggested changes.

6. The authors rarely give consideration to contradictory views. Were there any?

Few contradictory views arose in our interviews but we have added these where they did occur (page 11, lines 292-297).

7. It would seem more logical to incorporate the healthcare professionals' experiences of BLW into the knowledge section (see comment 3 above), and it is unclear why this data is presented in a table.

We have taken the material out of the table as requested. Where appropriate we have included it in the text section under “Attitudes” because the attitudes formed from the experiences are more informative than the experiences alone.

Reviewer #2:

1. It is interesting that BLW is seen as an 'alternative' approach in NZ. It is here too, despite the fact that it is compatible with current NHS advice in the UK which is to introduce finger foods from 6 months.

In New Zealand BLW is not compatible with the New Zealand Ministry of Health (MOH) guidelines. The conventional method of infant feeding currently advised and supported by the MOH and healthcare professionals is to spoon-feed purées from 6 months and not to introduce finger foods until 7-8 months at which time they would generally only represent a small proportion of the diet. Therefore mothers following BLW are seen as following an alternative method, at least at this point in time.

2. It should be noted that BLW guidelines suggest avoiding pieces of hard fruit like apple to start with - especially if cut into small pieces.

To our knowledge, BLW guidelines do not advise avoiding apple to start with. We acknowledge that there are guidelines around avoiding hard foods such as nuts and foods in a coin shape because of the risk of choking. However photos online and in the BLW book show infants eating apples and this potentially creates confusion among parents, and is perhaps why some mothers following BLW are offering apple. Gill Rapley (the “founder” of Baby-led Weaning) is responsive to research findings, and we expect will respond with specific advice on avoiding raw apple as a first food when these findings are made public.

3. The authors explain why they chose the methodology used here - why a semi-structured interview?

Our qualitative interview approach was guided by Patton (see Patton MQ. Qualitative Research and Evaluation Methods. 2002). We used a semi-structured interview as outlined in Patton to include, in the first part, a structured framework to cover the same basic lines of inquiry around knowledge, attitudes and experiences, for which participants could express their own ideas and understandings. The second part of the interview followed an unstructured format to allow for probing and further questioning of ideas or individual circumstances that were not included in the original interview outline. As BLW is a relatively novel concept, with very little scientific literature, we felt that it was important to include the flexibility of an unstructured section in the interview.

4. It would have been more reassuring to have seen some blinded reliability analysis conducted on the themes (rather than just a verification process). Can the authors justify their approach?
We have added more description to the data analysis in our methods section please see page 7 lines 175-186 and also added lines 641-649 page 22 to acknowledge the limitations with our method of data analysis.

5. It is very concerning that only half of the professionals had heard of BLW, even more worrying

though was the fact that some were concerned about the introduction of finger foods at 6 months. This is a current recommendation in the UK. It would be useful to know what the guidance is in relation to finger foods in NZ.

Please see response to point 1.

6. I wonder whether some parents in the sample did not understand the difference between gagging and choking (since the 'choking' experiences reported were not serious). A line should be added about this somewhere.

We agree and have added a comment (page 21, lines 585 - 591).

7. Would it be useful to discuss what iron levels are needed, when and what evidence base supports this? To my knowledge the recommendations for paediatric nutrition levels are not supported by a strong evidence base. I would like to see something about this in the discussion since it was such a strong theme from the professionals.

Thank you for this comment. We did not feel it was necessary to discuss the levels of iron intake needed in infancy, as we were not assessing the iron intake of these infants. Current WHO and New Zealand MOH recommendations are to introduce iron-containing solid foods at 6 months so Health Professionals who were concerned because they considered that BLW might result in a low intake of iron from foods would be consistent with these recommendations.

8. I think it is misleading to focus on the small number of underweight children in our study. Most children in both groups were of a healthy weight. A line should be added somewhere about this.

We have adjusted the text accordingly (page 21, line 616).

VERSION 2 – REVIEW

REVIEWER	Dr Kate Harvey, PhD, CPsychol., AFBPsS Lecturer Department of Pschology The University of Reading UK
REVIEW RETURNED	18-Sep-2012

THE STUDY	The authors revisions have improved the manuscript signficantly. THere are a few remaining issues, I believe. 1) Description of Participants (Line 141): Greater specificity is required in the methods about the twelve parenting groups. In particular, were they groups that were advocates of BLW, or focused on BLW? This is not an issue of representativeness (the authors were not seeking to recruit a representative sample and don't have one), but readers need to know what sort of range of views were represented i.e. that parents were more likely to be proponents of BLW and other views may not have been included. 2) The first two sentences of Data Analysis (Lines 173 - 175) refer to data collection or process and would be better placed there. 3) The authors' conclusion regarding discouraging mothers using BLW from giving their infant raw apple remains too strong, and is not

	supported by their study. i)The sample recruited for the study, on which this data is based, is tiny and not representative of all mothers using BLW. To make a conclusion of this kind they would have needed to recruit a large, representative sample and included a description of the study's power. ii) Of this tiny, non-representative sample of mothers that were included in the study, few reported episodes of choking, and even fewer blamed raw apple. The authors are basing their conclusion to discourage mothers using BLW from giving raw apple on 4 mothers. iii) Moreover, none of the mothers reported choking, on raw apple or anything else, a concern (this is what your data tells you!).
RESULTS & CONCLUSIONS	Their conclusion to discourage mothers using BLW from giving raw apple is not warranted by their data.

VERSION 2 – AUTHOR RESPONSE

Reviewer #1 (Remarks to the Author):

1. Description of Participants (Line 141): Greater specificity is required in the methods about the twelve parenting groups. In particular, were they groups that were advocates of BLW, or focused on BLW? This is not an issue of representativeness (the authors were not seeking to recruit a representative sample and don't have one), but readers need to know what sort of range of views were represented i.e. that parents were more likely to be proponents of BLW and other views may not have been included.

We have added lines 149-151

2. The first two sentences of Data Analysis (Lines 173 - 175) refer to data collection or process and would be better placed there.

We have adjusted the manuscript to comply with this suggestion, please see lines 162-165.

3. The authors' conclusion regarding discouraging mothers using BLW from giving their infant raw apple remains too strong, and is not supported by their study.
i)The sample recruited for the study, on which this data is based, is tiny and not representative of all mothers using BLW. To make a conclusion of this kind they would have needed to recruit a large, representative sample and included a description of the study's power.
ii) Of this tiny, non-representative sample of mothers that were included in the study, few reported episodes of choking, and even fewer blamed raw apple. The authors are basing their conclusion to discourage mothers using BLW from giving raw apple on 4 mothers.
iii) Moreover, none of the mothers reported choking, on raw apple or anything else, a concern (this is what your data tells you!).

We have withdrawn the conclusions regarding raw apple from the abstract, previously lines 60 – 62 and the concluding statement, previously lines 661- 664. We have also altered the article summary (key messages) please see lines 85-88