Mothers’ perceptions of introducing solids to their infant at 6 months of age: Identifying critical belief-based targets to promote adherence to current infant feeding guidelines
Abstract

We investigated critical belief-based targets for promoting the introduction of solid foods to infants at 6 months. First-time mothers (N = 375) completed a Theory of Planned Behaviour belief-based questionnaire and follow-up questionnaire assessing the age the infant was first introduced to solids. Normative beliefs about partner/spouse ($\beta = 0.16$) and doctor ($\beta = 0.22$), and control beliefs about commercial baby foods available for infants before 6 months ($\beta = -0.20$), predicted introduction of solids at 6 months. Intervention programs should target these critical beliefs to promote mothers’ adherence to current infant feeding guidelines to introduce solids at around 6 months.

Key words. Theory of planned behaviour, beliefs, complementary feeding, introduction of solids, infants
Nutrition is fundamental to optimal growth and development in infancy and childhood, as well as health and wellbeing throughout life. One critical aspect of infant nutrition is the introduction of solid foods (also termed complementary feeding or weaning), whereby an infant previously fed only breast milk or formula gradually becomes accustomed to a wide variety of foods (National Health and Medical Research Council, 2003). In 2003 the World Health Organization adopted a ‘global public health recommendation [that] infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health’ (World Health Organisation, 2003). Exclusive breastfeeding is defined as no other fluids, including water, or food (World Health Organisation, 2003). Australian guidelines were modified accordingly to recommend that ‘exclusive breast feeding should be the aim for every infant’ (National Health and Medical Research Council, 2003).

A consequence of these recommendations are the parallel Australian guidelines that recommend the introduction of solids ‘at around’ 6 months to meet the increased nutritional and developmental needs of infants (National Health and Medical Research Council, 2003). It is suggested that earlier introduction to solid foods offers no benefits and, particularly prior to 4 months, may be associated with negative outcomes such as inadequate nutrient and energy intake due to displacement of breast milk and formula and the stress on immature gastrointestinal, immune, and renal systems (Kaye, Patterson, Croaker, Norton, & Lewis, 2008; Naylor & Morrow, 2001). Despite clear recommendations to the contrary, many mothers introduce solids prior to 6 months of age. A large representative study of US mothers (N=2907) reported that 51% had introduced solids before 4 months (Grummer-Strawn, Scanlon & Fein, 2008). A 2003 telephone survey of 1201 children under five years in Queensland, Australia reported that 18% and 67% of infants were introduced to solid foods before the ages of 4 and 6 months respectively (Gabriel, Pollard, Suleman, Coyne, & Vidgen, 2005). Similar prevalence has been found in other developed countries (Bolling, Grant,
Numerous studies have examined the demographic and feeding mode predictors of timing of introduction to solid foods (see Lanigan, Bishop, Kimber, & Morgan, 2001). Few studies, however, have investigated the more modifiable enablers and barriers that influence mothers’ choices regarding the timing of solid food introduction (Alder et al., 2007; Fewtrell, 2004; Wright, Parkinson, & Drewett, 2004), and even fewer have done so using established theoretical frameworks (Brophy-Herb, Silk, Horodynski, Mercer, & Olson, 2009) and all have defined early weaning as prior to 3-4 months. Only a single study has examined factors associated with the decision to delay introduction of solids to 6 months (Arden, 2010). In this retrospective study of well educated UK mothers (N=140) the strongest predictor of timely introduction to solid foods was the perceived importance of the recommendation to delay introduction of solid foods until 6 months. Furthermore, early introduction was associated with the perceived importance of signs from the baby that they were ready for solid foods. If the prevalence of timely introduction of solid foods is to be increased, particularly in the context of increasing the prevalence and duration of exclusive breastfeeding, a clear theoretically-based understanding of mothers’ decision making is needed.

The Theory of Planned Behaviour (TPB; Ajzen, 1991) is a widely used, well validated decision making model (Armitage & Conner, 2001) that suggests that the proximal determinate of behaviour is intention to engage in that behaviour. Intentions are determined from three constructs: attitudes (perceived positive or negative evaluations of the behaviour), subjective norms (perceived pressure from others to perform the behaviour), and perceived behavioural control (perceived amount of control over behavioural performance; also believed to influence behaviour directly) (Ajzen, 1991). Underlying the TPB is the assumption that the antecedents of attitude, subjective norms, and perceived behavioural
control are corresponding salient beliefs, which reflect an individual’s intention and subsequent behaviour (Ajzen, 1991). Attitudes are determined by the individual’s beliefs about the likely outcomes of performing the behaviour (behavioural beliefs) weighted by the positive or negative evaluations of these outcomes. Subjective norms relate to the individual’s beliefs about important referents either approving or disapproving of a given behaviour (normative beliefs) weighted by the individuals motivation to comply with these important individuals or groups. Perceived behavioural control is based on the individual’s beliefs concerning the extent to which internal and external factors may inhibit or facilitate performance of a given behaviour (control beliefs) weighted by the expected impact these factors would have on behavioural performance if they were present (Ajzen, 1991).

A number of studies have utilised the knowledge of these underlying beliefs to increase our understanding of dietary behaviours (e.g., Masalu, & Åstrøm, 2003; Pawlak et al., 2008) as well as maternal feeding practices, specifically breastfeeding (Bai, Middlestadt, Joanne Peng, & Fly, 2009; McMillan et al. 2009; Swanson & Power, 2005). No study, however, has examined the underlying cognitive processes that influence introduction to solid foods and, thus, there is limited empirically based evidence to guide intervention programs aimed at improving mothers’ decisions about an important early maternal feeding behaviour. Using the TPB as a theoretical framework, we aimed to investigate the critical beliefs that underlie mothers’ decision making about introducing solid foods at 6 months. Critical beliefs are those that are revealed as being significantly related to, and independently influence, the target behaviour (Fishbein, von Haeften, & Appleyard, 2001). Examining beliefs that have a strong influence on a given behaviour allows for the identification of targets for a tailored intervention aimed at changing the given behaviour which, in turn, increases the potential effectiveness of a resultant intervention (Fishbein et al., 2001). Specifically, in this study, we assessed beliefs relating to (i) benefits of introducing solids (behavioural beliefs), (ii)
important referents’ expectations of introduction to solids (normative beliefs), and (iii) motivating and inhibiting factors toward introducing solids (control beliefs) and their relative influence on the timing of introduction to solid foods among first-time mothers.

Methods

Participants and Procedure

In 2008 a consecutive sample of first-time mothers were approached for participation in the NOURISH trial (Daniels et al., 2009). Mothers were aged 18 years or older and had delivered healthy term infants in one of seven hospitals in the capital cities (Brisbane and Adelaide) of two Australian states. Eligible mothers were approached on the postnatal wards and gave consent for later contact (when their infant was 4-7 months of age) regarding enrolment in the NOURISH study. At the postnatal contact brief demographic data were collected and mothers indicated if they were willing to be contacted separately regarding other studies on infant feeding. Mothers consenting to the latter formed the sampling frame for the TPB study described in this paper. They were invited separately under separate ethics approval to complete the TPB questionnaire 1-3 months prior to their decision whether or not to enroll in the NOURISH trial.

At the first contact 85% (N=1932) of eligible mothers were approached on the postnatal wards, 74% (N=1422) of whom provided contact details. Of those who declined to provide contact details, 44% (N=510) agreed to provide brief demographic data. These data indicated those agreeing to later contact were more likely to have a university education (41% vs. 22%). There were few mean differences in other key variables (e.g. birth weight 3.48 vs. 3.46 kg; age 27 vs. 26 years). Of the participants consenting to be re-contacted for enrolment in the NOURISH trial, 75% (N=1062) also provided consent (either active or passive) to be contacted regarding other related studies. Of these, 379 were excluded as their infant turned 3 months prior to finalisation of the TPB questionnaire and the mail out commencing in June.
2008. Thus, the questionnaire was sent to the remaining 683 mothers (43% in Adelaide) when their infant was approximately 3 months old. Queensland 2003 data indicates that less than 10% of mothers would have commenced introduction to solids prior to this age (Gabriel et al., 2005). Only 54% of those who returned the questionnaire subsequently enrolled in the NOURISH trial and there were no differences on age of introduction of solids and key covariates between those who enrolled in the trial and those who consented for the TPB study only.

The questionnaire assessed the direct TPB predictors (namely attitude, subjective norms, and perceived behavioural control), along with group norm, feeding mode, and the additional demographic measures. The questionnaire also assessed the indirect TPB predictors (i.e., the underlying beliefs of attitude, subjective norm, and perceived behavioural control namely behavioural, normative, and control beliefs, respectively) which are the focus of this paper. The study used a prospective design with two waves of data collection. The main questionnaire (infant aged approximately 3 months) assessed the direct and indirect TPB predictors, along with group norm and demographic measures. The follow-up questionnaire (infant aged approximately 7 months) assessed the age (in months) at which mothers first introduced solids.

A letter of invitation explaining the study, the questionnaire, and a reply paid envelope were mailed to eligible participants. Mothers who did not wish to participate were asked to return the blank questionnaire. A reminder letter was sent at two weeks with a second reminder letter and replacement questionnaire sent at three weeks. Ethics approval for recruitment to the NOURISH study was obtained from the relevant hospital human research ethics committees with the ethics committees for both Queensland University of Technology and Flinders University approving the TPB study.
Measures

The target behaviour of introducing solids was defined as, “any foods or drinks given to your baby in addition to breast milk, formula, or water”, and introducing solids for the first time at 6 months of age was the defined timeframe. Examples of solids were presented and included: homemade foods that are easy to eat such as mashed fruits or vegetables; commercial baby foods such as rice cereal, tins or jars of baby foods; and drinks like cow’s milk or juice.

Elicitation Study. An elicitation study was conducted with 33 Australian first-time mothers, of infants aged 6-12 months. Individual and group interviews were used to identify the most commonly occurring behavioural, normative, and control beliefs, and other experiences related to the process of introduction to solid foods. The interview guide comprised open-ended questions as outlined by Fishbein and Ajzen (1975). Interviews were conducted to the point of theoretical saturation, where additional interviews yielded only repetitive material. Preliminary thematic content analysis was undertaken to identify the most common responses to each of the TPB-based questions (Joffe & Yardley, 2004). More detailed thematic qualitative data analysis was undertaken and will be reported elsewhere.

Questionnaire. Based on responses generated from the qualitative study, current literature, and clinical experience of the senior investigator (LD) questionnaire items were developed and framed in accordance with TPB recommended methods (Ajzen, 1991). Behavioural, normative, and control belief-based items were scored on 7-point Likert scales, scored extremely unlikely (1) to extremely likely (7). Participants were asked to rate how likely each of (i) four benefits/outcomes would occur if they introduced solids at 6 months (behavioural beliefs) (ii) seven referents would think they should introduce solids at 6 months (normative beliefs) and (iii) three inhibiting and two motivating factors would prevent them from introducing solids at 6 months (control beliefs or barrier/enablers). For a full listing of
belief-based items, see Table 1. In this study only behavioural and control beliefs that were directly and uniquely relevant to the specific target behaviour and the defined time frame (i.e., introduction of solids at 6 months of age) were included.

The outcome measure of behaviour was measured on a single-item assessing the age in months at which the infant was first introduced to solids (i.e., “At what age was your baby first given solid foods? ____ months”). To maximise congruence between the measures, both prediction and criterion variables were measured at the same level of specificity in terms of action, target, and time and were constructed in line with TPB recommendations (Ajzen, 1991). Given a key rationale for the study was to identify modifiable beliefs that influence mothers’ adherence to current guidelines for the timing of the introduction of solids, we chose to define the target behaviour in months rather than weeks to maximize congruence with the wording of these guidelines (National Health and Medical Research Council, 2003; World Health Organisation, 2003).

**Statistical Analysis**

Guidelines as specified by von Haeften, Fishbein, Kasprzyk, and Montano (2001) were used to identify the critical beliefs for targeted interventions to promote the introduction of solids at 6 months. This approach to analysing beliefs provides the necessary steps to identify the critical beliefs that underlie a particular behaviour and, thus, identify specific targets for an intervention. First, the Pearson product-moment correlation matrix was analysed to identify those beliefs that significantly correlated with the behaviour of introducing solids at 6 months. Then, to identify those beliefs that make independent contributions to the behaviour, within each belief-based measure, the significant key beliefs were entered in a multiple regression analysis. Finally, all of the key beliefs that made an independent contribution to the prediction of behaviour were entered into a final regression. All analyses were carried out using the statistical software SPSS version 17.0.
Results

Participants

Three hundred and seventy-five (55% response rate) first-time mothers with mean (±SD) age of 29±2 years at the birth of their baby completed the questionnaire. Most (n=281, 75%) were born in Australia, were in a partnered relationship (n = 343, 92%), were non-smokers (n = 305, 81%), and 168 (45%) had university degree qualifications. The mean (±SD) age of the infants at the time of questionnaire completion was 13±3 weeks and 32 (9%) had been given solid foods. Mothers who returned completed questionnaires were older (29±4 vs. 26±3 years; p < 0.001) and more likely to have a university degree (45 vs. 26%; p < 0.01) than those who did not return a questionnaire. However, there was no difference in birth weight or self-reported pre-pregnancy weight status. Of those who returned the main questionnaire, 69% (257) returned the follow-up questionnaire which provided the age of solid introduction data. The mean age of the babies at this time point was 31(±2) weeks.

Belief-based Analyses

The means and standard deviations of the beliefs and the correlation coefficients with behaviour are reported in Table 1. The beliefs that significantly correlated with behaviour, within each belief-based measure, were then entered into a regression analysis (i.e., three regression analyses were performed). The behavioural belief of “decreased risk of my baby developing a food allergy” (β = .16, p = .016); normative beliefs of “partner/spouse” (β = .25, p = .04), “doctor” (β = .46, p = .005); and the control belief of “being able to access commercial baby foods that are suitable before 6 months” (β = -.21, p = .004) contributed independently to the prediction of introducing solids at 6 months. To identify the critical belief-based targets, these four key beliefs were entered into a final regression analysis. As shown in Figure 1, three of the four beliefs independently contributed to the prediction of
behaviour, with the final model explaining 20% (adjusted $R^2 = .18$) of the variance in mothers’ behaviour of introducing solids at 6 months.

<insert Table 1 about here>

<insert Figure 1 about here>

**Discussion**

The current study is amongst the first to use a well established theoretical framework to inform a quantitative examination of the critical beliefs that influence mothers’ decisions to introduce solids at 6 months of age. We found those normative beliefs about partner/spouse, doctor and the control belief about being able to access commercial baby foods that are suitable before 6 months were revealed as critical beliefs contributing independently to the prediction of introducing solids at 6 months, with the beliefs explaining 20% of the variance. This explained variance is somewhat higher than other studies investigating beliefs on people’s behaviour (Hamilton & White, 2007; White, Terry, Troup, & Rempel, 2007). According to a TPB approach, beliefs have a much greater impact on behavioural intentions than actions themselves (see Footnote 1 in which beliefs explained 51% of the variance in mothers’ intentions to introduce solids at 6 months), with the effects of beliefs on behaviour mediated via their impact on the other components of the TPB (Ajzen, 1991). Overall, the current findings suggest that social approval from partner/spouse and doctors is particularly important for mothers when determining the timing of introduction to solid foods. Furthermore, the influence of marketing messages about commercial baby foods as suitable for infants before 6 months is also important to consider in this context.

Several studies have identified similar influences on mothers’ decisions regarding the timing of solids. Horodynski et al. (2007) used the TPB framework as a basis for qualitative thematic analysis from six focus groups ($N=23$) with low income mothers enrolled in the Medicaid program in the US. They identified subjective norms based on social pressure from
families as an important influence on the decision to introduce solid foods. A large English cohort study \((N = 707; \text{Wright et al., 2004})\) reported that mothers who introduced solid foods earlier (i.e., < 3 months) were significantly more likely to have done so than mothers who introduced solid foods later (i.e., > 4 months) on advice from friends and family (40\% vs. 25\%; \(p = \chi^2 0.024\)). A recent US qualitative study (Olson et al., 2010) explored child health professionals’ perspectives (n=36) of low income mothers’ infant feeding practices. The health professionals identified that social referents were an important influence on timing of introduction to solid foods. Early introduction to solids was reported to be influenced by the advice of female relatives, whereas mothers who perceived the infant feeding recommendations as important were more likely to delay the introduction of solid foods.

In contrast to our findings, however, which did not identify any of the behavioural beliefs as being critical to the decision to introduce solids at 6 months, Horodynski et al. (2007) also found that avoiding potential negative effects of early introduction to solids was a more important motivator than the positive outcomes of later introduction. Furthermore, unlike our study, interpretation of signs of readiness for solids and diagnosis of a medical condition such as reflux have been identified as important for early introduction to solids by both mothers (Wright et al., 2004) and health professionals (Olson et al., 2010).

Arden (2010) is the only study to our knowledge to examine belief-based predictors of adherence to the new guidelines (i.e., the decision to introduce solid foods at 6 months). An electronic questionnaire was used to collect quantitative data from 140 well-educated UK mothers. The target children had a mean age 18.5 (6-36) months and hence participants were providing a retrospective recall of their decision making. Based on factor analysis of 23 items and subsequent regression analysis, the importance and quality of health visitor advice and signs from the baby (weight and hunger) were negatively associated and the importance of the WHO recommendations was positively associated with actual age of introduction of solid
foods in weeks (adjusted $R^2 = 0.49; p < 0.001$). It is interesting to note that the ‘signs from the baby’ factor also included advice from family members. These data suggest that family and health professional advice is important but, given the negative relationship, is not supporting adherence to the new guidelines. Our data also suggest that these social influences are important but, in our context, the perceived approval of significant others (doctors and spouse/partner) to wait to 6 months is supporting mothers’ decisions to do so. Additionally, in contrast to our results, participants in the Arden study (2010) rated the availability of commercial baby foods for infants less than 6 months as ‘not at all important’ in their decision to introduce solid foods at 6 months. These differences between the studies may reflect the different analytical approaches adopted, higher prevalence of university educated mothers (70% vs 45%), and potential recall bias in the UK study.

Overall, our study suggests that normative beliefs from partner/spouse and doctors are important in determining timely introduction of solid foods. The influence of marketing messages regarding suitability of commercial baby food for infants less than 6 months is an additional significant influence. These data are relevant to health professionals working with first-time mothers to improve early feeding practices as they provide a basis for focusing advice on modifiable individual and contextual factors. Based on our data and results of other studies (Alder et al., 2007; Arden, 2010; Brophy-Herb et al., 2009; Olson et al., 2010), strategies to improve prevalence of introduction to solids at 6 months should provide anticipatory guidance to (i) recruit the approval of partner/spouse and healthcare professionals, specifically doctors, to support the mother to plan to delay introduction to solid foods until 6 months and (ii) address mixed messages arising from the marketing of commercial baby foods as suitable for infants under 6 months. Consistent with our finding that the influence of significant others is a key predictor of maternal feeding decision making, a recently reported pilot intervention has incorporated explicit content and role playing to
enhance mothers’ self efficacy in defining their feeding intentions and then discussing these with and dealing with conflicting advice from social groups (Brophy-Herb et al., 2009).

This study has a number of strengths including the prospective examination of a unique and specifically defined behaviour and a relatively large sample with an acceptable response rate that included mothers from diverse educational backgrounds. The study also has a number of limitations including the use of self-report data which may result in acquiescent bias and a sample of primiparous women from a predominately Caucasian sample. Thus, the relevance of the results to mothers from other cultural backgrounds is uncertain. Although previous research suggests that feeding behaviours applied to the first child are strongly predictive of feeding choices with subsequent children (Bolling, 2006; De Vanzo, Starbird, & Leibowitz, 1990), future research could examine the efficacy of the belief-based framework of the TPB applied to women having their second and subsequent children. Furthermore, the elicitation process and, thus, further examination of underlying beliefs in relation to introduction of solids at 6 months were predetermined by the structured format of the TPB framework which may have limited the study’s scope. For example, the focus of social influences within the TPB is on normative pressures and, as such, limits exploring the effect of other social/normative influences such as the influence of social role expectations (see Terry Hogg, & White, 1999) or moral norms (see Manstead, 2000) on mothers’ adherence to current infant feeding guidelines.

Conclusion

This study, using a TPB belief-based approach, provides information that can be used to inform intervention strategies aimed at increasing mothers’ decisions to introduce solids at 6 months of age and hence adherence to current guidelines, including those related to exclusive breastfeeding. Specifically, the findings suggest that attention to control factors, such as the ability to access commercial baby foods that are suitable for infants before 6
months and considering the social approval of partner/spouse and health professionals in understanding decision-making about the timing of introduction to solid foods, is likely to assist in improving mothers’ decisions to adhere to recommended national guidelines, thus maximising the benefits to the health and wellbeing of the infant. Future research should evaluate the efficacy of intervention strategies that target these identified critical beliefs in changing mothers’ behaviour in relation to the timely introduction of solid foods when their infants are 6 months of age.
Acknowledgements

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References


Fishbein, M., von Haeften, I., & Appleyard, J. (2001). The role of theory in developing effective interventions: implications from Project SAFER. *Psychology, Health Medicine, 6*(2), 223-238.


Table 1. Means and standard deviations of the individual behavioural, normative, and control beliefs, and correlations with behaviour (age of introduction to solids; N = 257).

<table>
<thead>
<tr>
<th>Behaviour: Age of introduction to solids (months)</th>
<th>M</th>
<th>SD</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural beliefs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreased risk of my baby choking</td>
<td>4.69</td>
<td>1.61</td>
<td>0.08</td>
</tr>
<tr>
<td>Decreased risk of my baby developing a food allergy</td>
<td>4.93</td>
<td>1.62</td>
<td>0.16*</td>
</tr>
<tr>
<td>Provide my baby with extra nutrients needed for growth</td>
<td>5.79</td>
<td>1.41</td>
<td>0.00</td>
</tr>
<tr>
<td>My baby’s digestive system will be ready for food</td>
<td>5.84</td>
<td>1.17</td>
<td>0.10</td>
</tr>
<tr>
<td>Normative beliefs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Husband/Partner</td>
<td>6.18</td>
<td>1.57</td>
<td>0.35***</td>
</tr>
<tr>
<td>Friends with children</td>
<td>5.92</td>
<td>1.54</td>
<td>0.19**</td>
</tr>
<tr>
<td>Mother</td>
<td>5.90</td>
<td>1.72</td>
<td>0.24***</td>
</tr>
<tr>
<td>Partner’s Mother</td>
<td>5.67</td>
<td>1.79</td>
<td>0.24***</td>
</tr>
<tr>
<td>Older female family members or friends</td>
<td>5.62</td>
<td>1.70</td>
<td>0.15*</td>
</tr>
<tr>
<td>Child health nurse</td>
<td>6.38</td>
<td>1.19</td>
<td>0.22**</td>
</tr>
<tr>
<td>Doctor</td>
<td>6.23</td>
<td>1.38</td>
<td>0.32***</td>
</tr>
<tr>
<td>Control beliefs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of information about how and when to introduce solids</td>
<td>2.94</td>
<td>2.09</td>
<td>0.00</td>
</tr>
<tr>
<td>Seeing signs that my baby is ready for solids before 6 months</td>
<td>4.63</td>
<td>1.98</td>
<td>-0.18**</td>
</tr>
<tr>
<td>Conflicting advice about when to introduce solids</td>
<td>3.38</td>
<td>2.00</td>
<td>-0.17*</td>
</tr>
<tr>
<td>Diagnosis of a medical condition that influences when solids can be introduced</td>
<td>4.89</td>
<td>1.99</td>
<td>-0.10</td>
</tr>
<tr>
<td>Being able to access commercial baby foods that are suitable before 6 months</td>
<td>2.98</td>
<td>2.12</td>
<td>-0.26***</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < .001.
Figure 1. Critical belief-based targets for promoting the introduction of solids at 6 months (N = 219). Note. Beta weights in parentheses. Note. R = .44, Adjusted R² = .18, Standard Error of the estimate = .73.

*p < .05. **p < .01.
Some debate exists over analysis of TPB beliefs in that belief-behaviour associations are suggested for investigation (Sutton, 2002; Weinstein, 2007); however, it is also suggested that analyses focused on belief-intention relations are appropriate (von Haeften et al., 2001). Given this debate, we also examined belief-intention relations following the same principles as outlined above. Behavioural intention in relation to “introducing solids to your baby (for the first time) at 6 months of age” was measured by three items (e.g., “I intend to introduce solids when my baby is 6 months old”, scored strongly disagree [1] to strongly agree [7]), and the scale was reliable ($\alpha = 0.96$). We found a similar pattern of results in that normative beliefs of “partner/spouse” ($\beta = .45, p = <.001$), “doctor” ($\beta = .0.17, p = .004$); and the control belief of “being able to access commercial baby foods that are suitable before 6 months” ($\beta = -.12, p = .004$), were revealed as the critical beliefs for mothers’ intentions to introduce solids at 6 months. The behavioural belief of “my baby’s digestive system will be ready for food” ($\beta = .17, p < .001$), however, was also identified as a critical intention belief. The final model containing the critical beliefs explained 51% of the variance in mothers’ intentions to introduce solids at 6 months.