The Role of Mother-centred Factors Influencing the Complex Social Behaviour of Breastfeeding: Social Support and Self-efficacy

Joy Parkinson, Queensland University of Technology, joy.parkinson@qut.edu.au
Rebekah Russell-Bennett, Queensland University of Technology, rebekah.bennett@qut.edu.au
Josephine Previte, University of Queensland, j.previte@business.uq.edu.au

Abstract

This research investigated the role of mother-centred issues that influence breastfeeding behaviours. The need for social marketing research for breastfeeding is indicated by the fact that despite evidence of the health benefits to both the infant and mother of longer breastfeeding duration, rates in developed countries have failed to increase in recent decades. Breastfeeding is a complex behaviour that for many women involves barriers that influence their commitment to continue breastfeeding. Structural equation modelling was used on a sample of 405 respondents to an online survey. The analysis revealed that personal social support had a significant impact on breastfeeding self-efficacy, which in turn had a significant impact on breastfeeding behaviour. The findings and implications for both social marketing theory and practice are discussed.

Keywords: social marketing, breastfeeding, loyalty, social support

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Introduction

Social marketing has been shown to be an effective change management approach for a range of social issues such as healthy eating, tobacco cessation, alcohol levels, recycling and breastfeeding. Governments are currently turning to social marketing for the social issue of breastfeeding because of the declining levels of sustained breastfeeding behaviour in many developed countries. This is despite many millions of dollars of funding on health education campaigns promoting the benefits of breastfeeding (Fairbank et al., 2002). The need for social marketing research in the area of breastfeeding is indicated by the fact that despite evidence of the health benefits to both the infant and mother of longer breastfeeding duration (ABS, 2003; Booth and Parsons, 2001; WHO, 2001; Newcomb et al., 1994), breastfeeding rates in Australia have failed to increase (ABS, 2006). Often, health promotion campaigns aim to encourage simple, "doable" behaviours (McDermott, Stead and Hastings, 2005), yet breastfeeding is not a simple, "doable" behaviour. Rather, breastfeeding is a complex behaviour that for many women involves physical and emotional barriers that influence their commitment to continue breastfeeding (Dennis and Faux, 1999; Rempel, 2004). Most of the promotional campaigns encouraging breastfeeding portray breastfeeding as normal and easy (Horswill, 2009), however this is far from reality for many women. Therefore the use of a social marketing approach which takes the complexity of the behaviour into account may be more appropriate.

For many women, the day to day challenges of breastfeeding outweigh the benefits and so the best intentions go astray with women turning to formula feeding. Typically, health departments focus almost exclusively on the benefits for the baby (baby-centred campaigns) without acknowledging that the barriers to breastfeeding are almost always mother-related (mother-centred). Thus this research seeks to investigate the key mother-centred factors and the effect they have on sustained breastfeeding behaviour as a base for informing future social marketing campaigns. The research question being addressed in this paper is: *What influence do mother-centred factors of personal social support and self-efficacy have on breastfeeding duration in a social marketing context?*

Baby-centred Factors

Health campaigns typically rely on education and awareness using a rational approach to behaviour change focussing on attitudes and subjective norms. Attitude towards breastfeeding in general is the person's favourable or unfavourable feeling of performing that behaviour, determined by behavioural beliefs about the outcome of the behaviour and evaluation of the outcome (Ajzen, 1991). When women form a positive attitude towards breastfeeding, it is expected they will be more likely to have a stronger desire to adopt the behaviour, thus they are more likely to participate in the behaviour (Perugini & Bagozzi, 2001). Subjective norm refers to the individual's perceptions of social pressure to perform or not perform a given behaviour and is determined by normative beliefs which assess the social pressures in the individual about a particular behaviour (Perugini & Bagozzi, 2001). Prior research on breastfeeding behaviour indicates that using an education approach has limited success in improving intentions to breastfeed and breastfeeding behaviour (Kistin, et al. 1990; McInnes, 2000). This highlights the importance of using more than promotion and education to influence breastfeeding intentions and behaviour.

Mother-centred Breastfeeding Behaviour

During the last two decades, there has been no significant increase in breastfeeding behaviour (ABS, 2003; Booth and Parsons, 2001; WHO, 2001; Newcomb *et al*., 1994). To address this issue, several breastfeeding support programs have been developed by health professionals. However, a systematic review of 13 program evaluations revealed that these types of programs failed to provide improved breastfeeding outcomes beyond two months duration (Sikorski and Renfrew, 1999). The failure of such programs to demonstrate improvements is an indication that although professional support is important, alone it is insufficient to improve breastfeeding outcomes. Conflicting advice from different health professionals may also be a contributing factor to this. An emerging trend in health care, is the use of personal social support, for example, diabetes management (Kwon et al., 2004), hypertension management (Giorgino et al., 2005), and smoking cessation (Moldrup, 2007). There is also evidence linking social support to breastfeeding duration (Mitra, Khoury, Hinton, and Carothers, 2004; Phipps, 2006; Rempel, 2004).

The role of social support for breastfeeding

Programs using peer/personal support were found to be more effective than those that did not (Dennis & Faux, 1999), although they have been limited to trials rather than to a broader target group. Social support is a term used to describe a variety of activities such as the expression of positive affect between people, social reinforcement, giving aid of some type and providing guidance or information (Dennis, Hodnett, Gallop and Chalmers, 2002). Social support includes emotional, informational, material, and encouragement (Kahn, 1979). In the breastfeeding context, peer support is an approach in which women that has personal, practical experience of breastfeeding offer support to other mothers. This kind of mother-to-mother support has occurred since the dawn of civilisation but has only recently been more formally organised and evaluated as a way of improving support for breastfeeding women (Battersby, Aziz, Bennett and Sabin, 2004; Phipps, 2006). Systematic reviews suggest that peer support for breastfeeding seems to work well when combined with other activities (Fairbank et al., 2002), leading to increased self-efficacy. This may be a key component of the effectiveness of social marketing campaigns where multiple elements of the marketing mix are used. A review of the health and marketing literature reveals a lack of research linking self efficacy and social support to sustained social behaviours.

The role of self-efficacy for breastfeeding

Intention to perform a behaviour is mainly motivated by the desire to carry out the behaviour Perugini and Bagozzi, 2001). Desired behaviour implicitly reveals the effects of attitude, subjective norms, and self-efficacy. Self-efficacy is a cognitive process of an individual's confidence in their perceived capacity to control their motivation, thought processes, emotional states and social environment in performing specific behaviours (Bandura, 1977; Dennis, 1999). Self-efficacy has continually demonstrated to be predictive for health behaviours through both causal associations and correlation (Dennis and Faux, 1999). Drawing insights from self-efficacy theory, it is evident that both emotional and cognitive drivers influence an individual's ability to engage in complex behaviour change, such as extended breastfeeding. Maternal confidence or breastfeeding self-efficacy has been shown to be positively associated with breastfeeding duration (Dennis and Faux, 1999). Therefore it is a latent variable that may be used to identify barriers to extended breastfeeding duration. The challenge for breastfeeding social marketers is to balance the size of the market (mass) with

the individual needs of the women for whom breastfeeding is an intensely personal issue. Hence, social marketers need to identify a cost-benefit exchange that will increase self-efficacy in women that is both personalised and cost-effective for a mass market. Social support has been identified as a mechanism that may assist in increasing self-efficacy (Dennis, 1999).

Comparing the effect of mother-centred factors with baby centred factors

There is conflicting evidence for the role of attitudes in predicting breastfeeding behaviour. Some research demonstrates the idea that a mother's attitude is a good predictor of breastfeeding behaviour (Dungy, Losch and Russell, 1994; Scott, Landers and Hughes, 2001). Conversely, Rempel (2004) found that breastfeeding attitude did not explain long-term breastfeeding behaviour. Previous studies have investigated the variants of attitude, self-efficacy and intentions to explain breastfeeding behaviours (Dick, Evans and Arthurs, 2002; Martens, 1997; Wambuch, 1997). However, in these studies both determinants and intentions were assessed prenatally or in the first weeks after birth, limiting the investigation of behavioural outcomes to the short-term. The aim of this study was to test whether mother-centred factors such as self-efficacy and social support have a stronger impact on breastfeeding intentions and behaviour than baby-centred factors such as attitudes and subjective norms.

Method

In order to test the impact of mother-centred variables of social support and self-efficacy compared to baby-centred variables for breastfeeding, a sample of 405 Australian women with children under the age of 18 months both breastfeeding and not breastfeeding, completed an online survey using a snowballing technique. The researchers sent 114 emails to women known to fit the sample criteria, who were also asked to pass on the survey link to other women with a child under 18 months. The measures used were: attitude to the act of breastfeeding (Perugini and Bagozzi, 2001), subjective norms (Ajzen, 1991), self-efficacy (Bandura, 1977), intentions to breastfeed (Ajzen, 1991), and breastfeeding behaviour (East *et al*., 2005). Confirmatory factor analysis to test the measurement model and structural equation modelling (SEM) to test the structural model, were undertaken using the AMOS 16.0 statistical program.

Results

The sample mean age was 31 years, which is representative of the population as the mean age of women giving birth in Australia is 30.7 years (ABS, 2007), and the mean age of their youngest child was 9 months. In addition, 97.4% of the sample stated that they were in a married/de facto relationship, with 1.8% stating that they were single. The mode income level of the sample was $50, 000 to $100, 000 per annum, with only 2% of the sample earning less than $25, 000. The majority of the sample had attained a university qualification (57.1%), which is not representative of the Australian population with only 25% of women aged 18-44 years having a university qualification (ABS, 2007). Thus, the sample was skewed towards well-educated, middle class women. In the sample, 75.9% were currently breastfeeding and 54.6% were first time mothers. The relationships between the variables are shown in Table 1.

Table 1. Structural coefficients- Direct effects

DV	IV	*b*	*B*	*C.R*	*P*
Intentions	Attitude	*-.09*	*-.03*	*-.56*	*ns*
Intentions	Subjective norms	*.05*	*.03*	*.66*	*ns*
Intentions	Self-efficacy	*.75*	*.50*	*10.10*	***
Self-efficacy	Social support	*.47*	*.38*	*8.12*	***
Behaviour	Self-efficacy	*2.23*	*.09*	*2.671*	**
Behaviour	Intentions	*13.08*	*.79*	*26.05*	***

Significance: ** $p < .01$, *** $p < .001$.

The overall results of the research supported the role of self efficacy in predicting breastfeeding intentions and behavioural outcomes. Whereas, the "baby-centred" variables of attitude towards the act of breastfeeding, and subjective norms were found not to be significantly related to intentions to breastfeed. The results of this study support the findings from health researchers who have also undertaken inquiries into the influence of social support on intentions to engage in healthy, sustainable behaviours. In this study, self-efficacy was also found to be significantly and positively related to intentions and sustained breastfeeding behaviour, indicating that self-efficacy has a direct positive effect on intentions to breastfeed and actual breastfeeding behaviour. The current research reveals however, that whilst there is a significant, direct relationship between self-efficacy and breastfeeding behaviour, it is not as strong as the mediated path through intentions. This indicates that the relationship is strengthened by intentions and commitment to breastfeeding.

Discussion

The research findings from studying mothers contribute new empirical evidence to the literature, and are consistent with the conceptual argument that a woman's breastfeeding self-efficacy influences her breastfeeding intentions (Dennis, 1999; Dennis and Faux, 1999). Similar results have been reported in studies of exercise behaviour (Jones, Courneya, Fairey and Mackey, 2005) and healthy eating (Astrom and Rise, 2001). The usefulness of self-efficacy in predicting breastfeeding behaviour has been substantiated by the results of this study and is consistent with most situations involving decisions of social behaviours (Rhodes and Courneya, 2003; Rhodes, Courneya and Jones, 2004). The results indicated that self-efficacy is a better predictor of intentions than either attitude or subjective norms. Individuals do not always have total control in most situations. Women can experience unexpected problems such as depression, attachment difficulties and sick babies, all of which they cannot control (Dennis and Faux, 1999). This indicates that interventions and programs addressing self-efficacy should be investigated and developed to increase intentions.

The relationship between social support and self-efficacy is significant and positive, indicating that the higher the degree of social support received by a woman, the higher the woman's self-efficacy (breastfeeding confidence). This finding is harmonious with a vast majority of the previous breastfeeding studies (Dennis, 1999; Dennis and Faux, 1999) and extends support to their findings. The result also supports the argument that personal social support is a key driver of a woman's breastfeeding self-efficacy. This means personal social support is one of the significant factors in sustaining breastfeeding behaviour. Self-efficacy was also a mediating variable between social support and intentions. This means that the greater the personal social support received, the greater the self-efficacy of behaviour resulting in increased behavioural intentions and behavioural outcomes.

Social support had a significant indirect relationship with intentions, while subjective norms did not. This finding is interesting considering they both refer to social contact. Social contact is an interaction with another person (Lawton, Silverstein and Bengston, 1994) and can include partners, friends, mothers, sisters, nurses and other health professionals. Social contact that provides social support was accessed through a variety of sources, with 75.8% of respondents indicating they receive a high level of support from their partner, whereas only 24% indicated they received any support from their GP. Social networking sites such as Facebook were revealed to be highly used by the sample to access information and support for breastfeeding. This is also supported by the thousands of women who are members of Facebook pages such as Kellymom.com, Circle of Moms and Blacktating. Other support websites and forums such as Bub Hub and Huggies Baby Club were also used by a majority of the sample and may warrant further investigation into their usefulness as a social support mechanism, as part of the marketing mix. This may be particularly useful for women who are isolated from their families and other social support networks. Elsewhere, Lefebvre (2007) has argued that new interventions utilising technology are being used with some success to improve health behaviours. However, a key challenge for social marketing is balancing the need for personalised interventions with the large size of the mass market being targeted. Traditionally mass media has been used however, interventions based on Internet and mobile technologies are providing new opportunities to overcome these dilemmas allowing social marketers to engage with their target audiences using a relationship marketing approach. Future social marketing programs for breastfeeding can thus provide alternative exchanges, including not only "baby centred" benefit exchanges, but also include a "mother-centred" relationship marketing approach that leverages the benefits of behavioural control, self-efficacy and social support from significant others – such as a women's partner, family and friends. Combining these relationship benefits with personal benefits – acknowledgement of the emotional costs and labour attached to breastfeeding for women – will result in a more holistic approach to creating sustainable breastfeeding programs in Western countries.

Conclusion

Women reported using a variety of social support, both personal and professional when breastfeeding. Social support from partners was found to be the most valuable in maintaining breastfeeding behaviour. This supports previous studies, which indicate that partners are seen as a primary source of personal social support (Cohen et al., 1985; Ingram, Rosser and Jackson, 2004). Consistent with other studies (Ingram, Rosser and Jackson, 2004), the result of this study implies an important role for fathers in the breastfeeding choice. However, fewer opportunities exist for fathers to prepare themselves to offer the emotional and practical support required by their partners to increase their breastfeeding self-confidence (Freed, Fraley and Schanler, 1992). This may suggest that health practitioners and social marketers need to include fathers in their breastfeeding strategies. Support from family members, particularly mothers and sisters, as well as from friends were also found to be important in maintaining breastfeeding behaviour. The results from this study suggest that interventions aimed at increasing personal social support rather than education campaigns, could significantly increase the duration of breastfeeding. An alternative, suggested pathway that social marketers need to embrace is interventions based on Internet and mobile technologies which are providing new opportunities to create contact and social support using a relationship marketing approach. Empowering mothers with the self-confidence and social support to continue breastfeeding will enable increasing numbers of mothers and infants to experience the important benefits of long-term breastfeeding.

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