

**Successful Breastfeeding Promotion: a
motivational model of informational design
applied and tested**

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ABSTRACT OF THESIS

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National and International statistics (WHO 2001) demonstrates that it remains easier to motivate women to initiate breastfeeding than sustain it. Evidence highlights two motivational factors, women lack confidence and professional support (Avery et al. 1998, Dodgson et al. 2003, Chezem et al. 2003). It was theorized that if midwives' instruction was confidence-building, women's persistence would increase. The research aim was to develop and test a motivational intervention using the ARCS Model of Motivational Instructional Design (Keller 1987).

Method: Four phases of the ARCS model reflected an Action Research design. Phase one analysed current instruction by applying Sansone and Harackiewicz (1991) goal conceptualization as a structure for a participant observation study (n=130 women and 20 educators). A second observation study, re-applied the structure to breastfeeding websites (n=30). Outcomes revealed instructional confidence and relevance deficits.

Phase two assessed the motivational effects of the observed instruction. A theoretical measurement tool was developed to analyze audience motivation. A convenience sample (n=202) of post-natal women who were breastfeeding consented to complete the questionnaire. Outcomes of Exploratory Factor Analysis confirmed the validity of confidence and relevance deficits.

Phase three defined the motivational objectives and selected strategies from the ARCS model for embedment into current instruction. The resulting intervention "Designer Breastfeeding" included a motivational version of antenatal instruction, breastfeeding web-site and postnatal midwife support. A pilot study (n=20) resulted in the discontinuation of the web-site.

Phase four experimentally tested "Designer Breastfeeding" with Baby Friendly Initiative instruction. First-time mothers (n=182) were recruited to a RCT. Women's motivation was measured using the diagnostic measurement tool. The questionnaire was completed prior to discharge from hospital. Telephone follow-up confirmed breastfeeding maintenance at three weeks. "Designer Breastfeeding" significantly increased maternal confidence ($p < .001$); perceived midwife support ($p < .001$) and persistence to breastfeed ($p < .001$).

Contribution to knowledge includes the development of "Designer Breastfeeding" in a response to the motivational analysis of current instruction, enabling midwives to motivate women to breastfeed through routine instruction. (Trial Registration No: ISTCTN47056748)

PUBLICATIONS RELATED TO BREASTFEEDING AND MOTIVATION

Book Chapters:

Stockdale J, Sinclair M, Kernohan WG, Keller JM (2010) Understanding Motivational Theory and the Psychology of Breastfeeding. In: Theory for Midwifery Practice (2010) Bryar R and Sinclair M.

Stockdale J, Sinclair M, Kernohan WG, Keller JM (2010) Motivation, Midwives and Breastfeeding: Theory in Action. In: Theory for Midwifery Practice (2010) Bryar R and Sinclair M.

Peer Reviewed Journal Articles and Responses:

Stockdale J, Sinclair M, Kernohan WG., Lavender T. (2010) What do we mean we talk about Intrinsic and Extrinsic Motivation to breastfeed? – A Commentary. *Journal of Human Lactation* 26: 15-17

(Published Response: Racine, E.F., Frick, K., Milligan, R (2010) Response to Stockdale, Sinclair and Kernohan on: What do we mean by intrinsic and extrinsic motivation *J Human Lactation* 26 (18) 1)

Stockdale J, Sinclair M, Kernohan WG, Keller JM, Dunwoody L, Cunningham JB, Lawther L, Weir P. (2008) Feasibility study to test Designer Breastfeeding™: a randomised controlled trial. *Evidence Based Midwifery* 6(3): 76-82

Stockdale J, Sinclair M, Kernohan WG, Dunwoody L, Cunningham JB, Lawther L, Weir P. (2008) Assessing the impact of midwives' instruction: the breastfeeding motivational instructional measurement scale. *Evidence Based Midwifery* 6(1): 27-34

Stockdale J, Sinclair M, Kernohan WG, Keller JM. (2007) Exploring the potential of the Internet to motivate breastfeeding. The Royal College of Midwives. *Evidence Based Midwifery* 5(1): 10-5

Stockdale J, (2001) A measure of intention: the theory of planned behaviour applied to breastfeeding. The Royal College of Midwives Journal 4(10): 330-333

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