

THESIS ABSTRACT SUBMITTED APRIL 2007

National and International statistics (WHO 2001) demonstrates that it is 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 conceptualisation 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 analyse 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, book 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.

This research project was funded by the (NHS) Research and Development Office for Northern Ireland and will be released by the University of Ulster library in May 2009.

CONFERENCE AND SEMINAR PAPERS

- J. Stockdale**, M. Sinclair, W.G. Kernohan (2002) Successful Breastfeeding Promotion - a motivational model of informational design applied and tested The Midwifery Colliquim, The University of Ulster
- J. Stockdale**, M. Sinclair, W.G. Kernohan (2003) Breastfeeding Motivation and the Theory of Planned Behaviour Annual Conference of the Association of Lactation Consultants in Ireland. Newry, Northern Ireland.
- J. Stockdale**, M. Sinclair, W.G. Kernohan (2005) Observation of Breastfeeding Demotivation International Confederation of Midwives Triennial Conference. 24th-28th July. Brisbane. Conference Proceedings: pg 350-353
- J. Stockdale**, M. Sinclair, W.G. Kernohan (2005) - Successful Breastfeeding Promotion – A motivational model of informational design applied and tested The Midwifery Colliquim, The University of Ulster. Feb.
- J. Stockdale**, M. Sinclair, W.G. Kernohan (2006) The Internet As Source of Motivation to Breastfeed The International Research Conference, Royal College of Nursing, York Racecourse, 21st-24th March Conference Proceedings 3:7:2, pg 92
- J. Stockdale**, M. Sinclair, W.G. Kernohan (2006) Breastfeeding Demotivation: Intentional or Unintentional. The Royal College of Midwives Annual Conference 9th – 11th May Torquay. Conference Proceedings C1, pg 37
- J. Stockdale**, M. Sinclair, W.G. Kernohan (2006) The Internet As Source of Motivation to Breastfeed The Midwifery Colliquim, The University of Ulster (Antrim) March.
- J. Stockdale**, M. Sinclair, W.G. Kernohan (2007) Increasing persistence to breastfeed through increasing maternal confidence and relevant midwife support: preliminary RCT findings. The International Research Conference, Royal College of Nursing, 1st -4th May Dundee Conference Proceedings.
- Stockdale J**, Sinclair M, Kernohan W.G., (2007) Motivational Instruction: Successful Outcomes from A RCT to Test Designer Breastfeeding. Launch of the Doctoral Midwifery Research Society, University of Ulster. April
- J. Stockdale**, M. Sinclair, W.G. Kernohan (2007) Successful Breastfeeding: a motivational instructional model applied and tested The Midwifery Colliquim, University of Ulster

PUBLICATIONS FROM RESEARCH

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

Ready for submission for Peer Review: **Stockdale J**, Sinclair M, Kernohan WG, Keller J, Dunwoody L, Cunningham B. (2007) Development and Testing of the Breastfeeding Motivational Instructional Measurement Scale

In preparation for submission: **Stockdale J**, Sinclair M, Kernohan WG, Dunwoody L. A Randomised Controlled Trial: midwife support as a successful means of sustaining breastfeeding behaviour

POSTER PRESENTATIONS OF RESEARCH

Stockdale J, Sinclair M, Kernohan W.G., (2006) - Midwives' Motivational Instruction: Successful Outcomes from A RCT to Test Designer Breastfeeding Joint Irish Nursing Organisation and the Royal College of Midwives. Carrick-on-Shannon

Stockdale J, Sinclair M, Kernohan W.G., (2007) – Motivational Instruction: Successful Outcomes from A RCT to Test Designer Breastfeeding Doctoral Midwifery Research Society

Stockdale J, Sinclair M, Kernohan W.G. (2007) Increasing Motivation to Breastfeed The Research and Development Office for Northern Ireland Annual Conference, Conference Proceedings pg 119

Awaiting Response – **Stockdale J, Sinclair M, Kernohan W.G. (2007) Increasing Motivation to Breastfeed through Routine Midwife Instruction: An RCT.** - Africa Midwives Research Network (AMRN) 6TH Biennial International Scientific Conference, Nairobi, Kenya NOVEMBER 2007