PROFESSIONAL DEVELOPMENT

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Effective Home Visiting Training: Key Principles and Findings to Guide Training Developers and Evaluators

David Schultz[1] · Shelby S. Jones[1] · Wendy M. Pinder[1] · Alicia E. Wiprovnick[1] · Elisabeth C. Groth[1] · Lisa M. Shanty[1] · Anne Duggan[2]

Abstract

Purpose Home visiting programs have produced inconsistent outcomes. One challenge for the field is the design and implementation of effective training to support home visiting staff. In part due to a lack of formal training, most home visitors need to develop the majority of their skills on the job. Home visitors typically receive training in their agency's specific model (e.g., HFA, NFP) and, if applicable, curriculum. Increasingly, states and other home visiting systems are developing and/or coordinating more extensive training and support systems beyond model-specific and curricula trainings. To help guide these training efforts and future evaluations of them, this paper reviews research on effective training, particularly principles of training transfer and adult learning. *Description* Our review summarizes several meta-analyses, reviews, and more recent publications on training transfer and adult learning principles. *Assessment* Effective training involves not only the introduction and modeling of concepts and skills but also the practice of, evaluation of, and reflection upon these skills. Further, ongoing encouragement of, reward for, and reflection upon use of these skills, particularly by a home visitor's supervisor, are critical for the home visitor's continued use of these skills with families. *Conclusion* Application of principles of adult learning and training transfer to home visiting training will likely lead to greater transfer of skills from the training environment to work with families. The involvement of both home visitors and their supervisors in training is likely important for this transfer to occur.

Keywords Home visiting · Training · Adult learning principles · Training transfer

Significance

This submission is a professional development review/commentary. Currently the home visiting field is experiencing an influx of funding via the Health Resources and Services Administration's Maternal, Infant, and Early Childhood Home Visiting grant program. One welcome outcome of this funding is that states and other home visiting systems are increasing their training opportunities for home visitors and supervisors. We know little, however, about the quality or effectiveness of home visiting training. To help guide both training developers and researchers, this manuscript reviews principles of adult learning and training transfer.

Introduction

The overall effectiveness of home visiting services has been inconsistent (Gomby et al. 1999). Partially to address this, in recent years increasing federal and state funds have supported the expansion of home visiting program capacities. Most notably, since 2010 the Health Resource and Service Administration's (HRSA) Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program has provided $1.9 billion in federal funding. The goal of this initiative is to increase the number of home visitors working within evidence-based programs across the country and to improve the quality of their services, such as via increased training and support. A recent survey of 88 sites that offer one of the four most frequently used home visiting models nationally—that

✉ David Schultz
dschultz@umbc.edu

1   Department of Psychology, University of Maryland, Baltimore County, 1000 Hilltop Circle, Baltimore, MD 21250, USA

2   John Hopkins University, Baltimore, MD, USA

is, Early Head Start (EHS), Parents as Teachers (PAT), Healthy Families America (HFA), and Nurse Family Partnership (NFP)—found that 25% of the home visiting workforce did not have a college degree (Michalopoulos et al. 2015). In part due to a lack of formal training, most home visitors need to develop the majority of their skills on the job. Additionally, high levels of staff burnout and turnover (Burrell et al. 2009; Lee et al. 2013) leave an ongoing need for training. Unfortunately, the current system for home visitor and supervisor training and support is fragmented (Home Visiting Research Network 2013). Home visiting agencies typically provide initial training in their model over several days. Those that use a curriculum in addition to the model will require additional training in the curriculum. Home visitors further receive many additional, supplemental trainings in a variety of topics. This training structure often leaves significant gaps in home visitor knowledge and skills. For example, some home visitors report that the training they receive is more likely content-oriented than skills-based (Tandon et al. 2008). Partially via MIECHV funding, many state and/or local home visiting systems have become more proactive and deliberate in providing and/or organizing supplemental trainings. For example, Early Impact Virginia organizes 34 trainings that are online or in-person, organized into 5 tiers based on home visitor experience level (http://homevisitingva.com/hvtrainings.php). Trainings cover a variety of topics, from child development in tier one to use of skills and reflective practice with trauma-exposed individuals in tier five.

Little empirical work—only two studies (Tandon et al. 2008; Wasik and Roberts 1994)—exists on home visiting training. A wealth of research from the education and human resource management fields exists on training transfer and adult learning, however, and these can inform home visiting training development and evaluation. This paper provides a review of these principles and their research base.

Training Transfer and Adult Learning Principles

A considerable knowledge base exists describing how adults most effectively acquire knowledge and skills (i.e., adult learning principles) and what makes it most likely they will use these skills in practice (i.e., training transfer). Baldwin and Ford's (1988) model of training transfer includes three components: training design, the work environment, and trainee characteristics. In the present review we focus on the training design and work environment. We draw largely from several meta-analyses and reviews (Baldwin and Ford 1988; Burke et al. 2013; Grossman and Salas 2011; Trivette et al. 2009).

Training Transfer: Training Design

Variability in training activities substantially influences learner acquisition of knowledge and skills. Trivette et al. (2009) consolidated previous theories of adult learning principles (e.g., Donovan et al. 1999; Knowles et al. 1998) into six practices, and reviewed the research base for these practices. In the following three sections we use their practices to structure our review of training design.

Introduce and Illustrate

The first two practices in adult learning, introduce and illustrate, engage trainees in a preview of training content (Trivette et al. 2009). A comprehensive orientation to the training content communicates the training goals and sets appropriate expectations for trainees. Next, trainers may illustrate the applicability or use of the content they are teaching (Trivette et al. 2009). Illustration promotes trainees' basic understanding of content and allows them to relate to concepts on a more personal level (Donovan et al. 1999). Introducing content and illustrating its importance often takes the form of a single activity or exercise in which trainees preview the material while simultaneously learning about how it applies to their profession. For example, introducing training content (e.g., child abuse indicators) simultaneous to illustrating its importance (e.g., keeping children safe using improved screening techniques) can increase trainees' receptivity to and engagement with training content. Trivette et al.'s (2009) review found that both introducing and illustrating course materials had large effects ($d = 0.60$, approximately) on promoting trainees' learning outcomes. Interestingly, a meta-analysis of modeling studies found that illustrating both effective and ineffective behaviors led to greater transfer of skills into daily work functioning than illustrating effective interactions alone (Taylor et al. 2005). For example, seeing examples of both sensitive screening for substance use but also overly leading and/or directive comments (e.g., "You don't use drugs, do you?") might help lead to a richer discussion and understanding of competencies.

Practice

Trainees will more likely apply skills they've learned to their work with families if they have a chance to practice those skills (Wilson et al. 2013; Coe Regan and Youn 2008). In Trivette et al.'s (2009) review, practice strategies had a large effect on improving trainees' knowledge, attitudes, and skills (Cohen's $d = 0.66$). Role playing is a particularly effective method for engaging trainees in newly learned material. Multiple studies find that the more realistic the training

environment, such as use of mothers enrolled in home visiting, the more likely skills will transfer to work settings (Grossman and Salas 2011; Salas et al. 2006).

Technology-enhanced trainings, such as practicing interactions via 3-D virtual reality or with another person via webcam, have offered new possibilities to practice skills. For example, trainees who have used virtual reality software for role playing home visits have described it as a valuable learning experience that sensitized them to the challenges of home visiting and gave them confidence in their ability to complete a real home visit (Wilson et al. 2013). Future research needs to determine, however, how well these skills transfer to actual interactions with families.

Evaluate, Reflect, and Master

The last three adult learning practices each involve reflection on practiced knowledge and skills and predict competence particularly strongly (d's $= 0.70 - 0.83$; Trivette et al. 2009). Whether for knowledge, attitudes, or skills, either self-evaluating or receiving feedback about competency performance and mastery is critical. For example, one study about knowledge acquisition found that receiving explanatory feedback following an incorrect response on an examination positively impacted a learner's subsequent performance on related questions ($d = 1.06$; Butler et al. 2013). For skills, practice experiences will most likely transfer to actual interactions with families if trainees are provided evaluative feedback about their performance (Bransford et al. 2000). Interestingly, some evidence suggests that allowing trainees to fail some increases the likelihood of training transfer even more (Burke and Hutchins 2007; Keith and Frese 2008). In business management research, "error management" training refers to practicing challenging tasks that will likely produce trainee errors as opposed to simpler tasks at which trainees will likely succeed. Use of at least some error management training predicts later on-the-job performance (e.g., Burke and Hutchins 2007; Keith and Frese 2008). For home visiting training, this would suggest that role plays or other forms of practice should not just include basic skills that home visitors and supervisors might acquire quickly and easily, but also slightly challenging or complex situations. Subsequent formative feedback or self-evaluation may prove most beneficial to their later skill use.

Along with evaluation and mastery, the step in adult learning found to predict improved competence most strongly is reflection ($d = 0.83$; Trivette et al. 2009). This refers to trainees reflecting upon what they've learned, identifying next steps in learning the targeted competencies, and setting goals for the use of the competencies. Not surprisingly, the efficacy of this process is maximized when supervisors attend trainings with trainees and can participate in this process (Taylor et al. 2005). In a study of training within

human resource departments, workers reported that supervisors' involvement in training and participation in discussions about competencies were the most important predictors of subsequent use of skills at work (Lim and Johnson 2002). Relatedly, multiple studies show that transferring training to actual performance is greatly enhanced when supervisors help trainees set goals for the use of learned skills (Burke and Hutchins 2007; Taylor et al. 2005). Within the home visiting field, including both supervisors and home visitors in a single training will place supervisors in a stronger position to help home visitors set goals for using skills learned and, during supervision, for encouraging and reinforcing the use of specific learned skills.

Training Transfer: Work Environment

Much of the critical work for training transfer occurs after the training day. Organizations with cues that prompt the use of learned skills, that provide rewards and incentives for the correct use of learned competencies, and that provide remediation for the incorrect use of competencies will more likely see competencies integrated into everyday work (Grossman and Salas 2011; Taylor et al. 2005; Velada et al. 2007). While peers can provide some of this support, a meta-analysis of training transfer studies found supervisors to play a more critical role than peers (Blume et al. 2010). Supervisors facilitate this process by first participating in the training and helping home visitors set goals for the use of learned competencies. Then, during supervision sessions, ongoing demonstration, evaluation, and reflection refine and reinforce the home visitors' use of the skills.

The ongoing evaluation of and reflection on learned skills is critical to training transfer. Video feedback has been used extensively to evaluate and improve communication skills of teachers, psychologists, social workers, doctors, and nurses. A recent meta-analysis demonstrates that it improves skills significantly, particularly if coupled with a structured observation form that guides the learner's and coach's/supervisor's observations (Fukkink et al. 2011). Although not used widely yet within home visiting, use of video feedback has garnered increasing attention. For example, in Mary Dozier's attachment and biobehavioral catch-up (Dozier et al. 2014), home visitors videotape their interactions with families and then self-assess and discuss with supervisors their use of "in the moment" comments during their visits. Additionally, Marturana and Woods (2012) demonstrated the efficacy of distance coaching via video feedback. Home visitors received two initial training days focused on effective interactions with caregivers and then for 8 months participated in monthly video review and conference calls. Coaches identified both positive interactions in videos and missed opportunities to use particular competencies. After 8 months, home visitors decreased in child-focused interactions in their visits

and increased in more explicit coaching techniques with mothers (Marturana and Woods 2012).

In addition to evaluation and reflection, the use of video recordings could support the continual demonstration (i.e., illustration) of effective home visiting practices. For example, a leading professional development model within early childhood education is MyTeachingPartner (Pianta et al. 2008). MyTeachingPartner involves online access to sample lesson plans and over 400 video exemplars of effective teacher-child interactions plus feedback from a coach who watches video of the teacher interacting with her/his classroom and provides feedback every 2 weeks. In one study, preschool teachers who used the online videos without any coaching demonstrated more positive change in sensitivity to and behavior management with children than teachers who did not use the videos (Pianta et al. 2008). Teachers who additionally had access to video-based coaching demonstrated even greater change, particularly in classrooms and schools situated in high needs areas (Pianta et al. 2008). A few states and home visiting systems have developed exemplar videos for home visiting competencies. Further and more widespread development of such resources would be a welcome additional support for home visiting professionals.

Summary

Quality training and ongoing support are likely crucial to the success of home visiting. This paper reviews known best practices in training and organizational support. As reported at the outset, one study suggests that many trainings fail to incorporate practice of skills let alone provide the opportunity to evaluate and reflect on them (Tandon et al. 2008). Principles of adult learning can guide training development to ensure that training is not simply Home Visiting 101—that is, a knowledge-based introduction to a topic—but rather thoughtfully and explicitly helps develop the home visitor's skills in interacting with families. And, supervisors' active participation in training, goal setting, and reinforcement and reflection on skill use will maximize the chances home visitors will utilize learned skills in their work with their families.

A limitation of this review is that it is a selective review of studies outside the home visiting literature. Whether or not all principles will transfer equally well to home visiting training remains unknown. Research does not exist to document how well home visiting training and support fits within principles of training transfer and adult learning. The Home Visiting Applied Research Collaborative is currently conducting a national survey of programs to characterize current expectations of home visitors and the extra-curricular professional development systems that support them. We need this and similar efforts to know how to best support home

visitors and their supervisors. Understanding the structure of training, whether supervisors are actively involved, and whether or not evaluation of training occurs would help the home visiting field identify areas for growth.

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