

Abstract

Title: Audiovisual parent training with motor practice may promote postural stability in healthy infants: A pilot study.

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Purpose/Hypothesis:

This study explores the use of an audiovisual parent training program combined with motor practice for promoting infant gross motor skill development and parenting self-efficacy.

Background:

Few studies have explored the effects of audiovisual parent training accompanied by motor practice on infant motor development. Even fewer studies have examined the impact of this training on parenting self-efficacy. This study was designed to evaluate the effectiveness of an audiovisual program for training parents to engage in gross motor stimulation activities with their infants. This study further examined the impact of program participation on parenting self efficacy.

Subjects:

A total of five healthy infants and their eight parents participated in the study. All infants were medically stable and under 9 months at initiation of the study.

Methods:

Baseline infant neuromotor development was assessed using the Peabody Developmental Motor Scale (PDMS-II) while parenting self-efficacy was measured using the Tool to Measure Parenting Self-Efficacy (TOPSE). The intervention consisted of instructional sessions at 3, 6, and 10-months followed by repeated measures of neuromotor development and parent self efficacy assessment. Each instructional session either one or both parents were given verbal instructions on use of Baby Builders Program, an audiovisual motor stimulation program accompanied by booklets describing all activities. Motor development and parenting self efficacy were scored at 3, 6, and 10 months (depending on time of enrollment).

Results:

Program participants' scores for the PDMS II stationary subtest improved across 3-6 month sessions when compared to national standard scores ($\alpha=.003$), while other subtests remained unchanged. Parent self-efficacy scores did not change with participation.

Conclusion:

While parent self-efficacy was not impacted by program participation, stationary skills

improved with use of the Baby Builders program, suggesting that this type of program may prove beneficial for parent training of postural control. This study had several limitations including few participants, varying frequencies of motor practice, and barriers to use of the program, including poor compliance. Parents reported that an advantage of the Baby Builders Program included providing methods of interaction with their infants that promoted development. Additional research with increased participation would yield a more convincing outcome of program participation. Furthermore, use of this program with families in early intervention could provide a valuable adjunct to parental instruction.

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