

Teaching Parents to Create Safe Infant Sleep Environments

(OTT ID 1468)

**Inventor: Dr. Jillian Austin, Health Psychology & Behavior Analysis
UW-Milwaukee**

For further information please contact:

Jessica Silvaggi
Senior Licensing Manager
1440 East North Ave.
Milwaukee, WI 53202
Tel: 414-906-4654
Jsilvaggi@uwmfdn.org



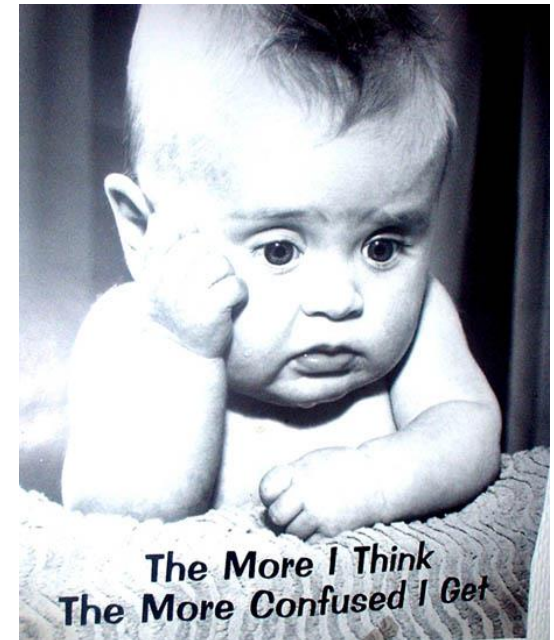
- **Market Size:**
 - US birth rate roughly [4 Million per year](#)
- **Potential Licensees:**
 - Childbirth classes
 - Hospitals & Birthing Centers
 - Government Agencies (ex. Health and Human Services)
 - Online Training Companies in Healthcare
 - Childcare Service Providers & Midwives

- **3,700 infants die from Sudden Unexpected Infant Death (SUID),** including Sudden Infant Death Syndrome (SIDS), every year in the U.S.
- **Classification of SIDS:**
 - 44% SIDS (Unknown after investigation)
 - 31% Unknown causes (Investigation not complete)
 - 25% Accidental Strangulation or Suffocation in Bed
- **Epidemiological research suggests additional sleep-related hazards**

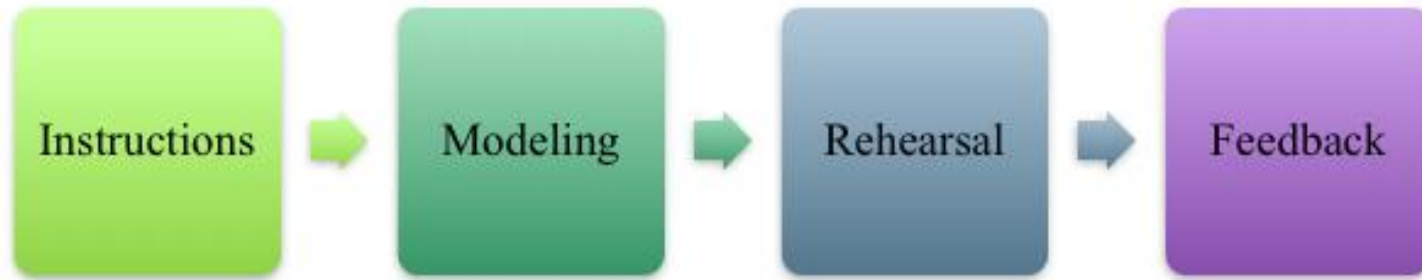


(AAP, 2016; CDC, 2017)

- **Insufficient Information:**
 - 30% of pediatricians do not discuss guidelines (Eron et al., 2011)
- **Inaccurate Information:**
 - 70% trust internet web sources, which are largely inaccurate (Chung, 2012)
- **Misunderstanding the Information:**
 - If they do not understand the rationale, they may disregard it
 - E.g., Bed-sharing allows for closer monitoring of your child (Salm Ward, 2015).



- Unsafe sleep is the leading *preventable* cause of infant death (National Center for Health Statistics, 2011)
- ***American Academy of Pediatrics (AAP) Recommendations (AAP 2016):***
 - Flat, firm, and separate surface, and ensuring blankets, pillows, and toys are not in the sleep area, nothing is covering or could cover infant's head, avoid overheating, and removing choking/strangulation hazards



- **Behavioral Skills Training:**

- **Instructions** describe the correct behaviors in specific, easy-to-understand details so the learner knows what to expect.
- **Modeling** is demonstrating the correct behavior for the learner.
- **Rehearsal** is practicing the new behavior and also allows the teacher to verify the skill has been learned and should be paired with feedback. The trainer should assess the rehearsal, provide corrective feedback on errors, and reinforce appropriate behaviors.
- **Feedback** from rehearsal opportunities should be immediate, descriptive, and always include praise and instructions to improve future performance.

- ***Program Development:***

- Collaborated with nursing department and pediatricians to determine whether training program included representative sleep options and accurate feedback during training
- Tested feasibility of training program and made modifications to instructions and program layout to ensure readability and usability

- ***Aims:***

- Assess baseline knowledge and teach parents to create a safe sleep environment as per AAP guidelines
- Compare the standard of care to a behavioral skills training model
- Assess generalization of skills, potential for behavior change, and differences in treatment effects by Health Literacy



Samples of Pre-Test Questions

Current Phase: Pre-Test

We want to know if parents can identify safety risks found in baby sleep spaces. Please identify problems you see in these pictures.



What risks to the infant's safety do you see in this sleep space picture?

RESPONSE RECORDED.



What risks to the infant's safety do you see in this sleep space picture?

On stomach, pacifier with a cord, blanket, infant could suffocate



What risks to the infant's safety do you see in this sleep space picture?

- Pre-test questions establish a baseline for parent's pre-existing knowledge



Please identify problems you see in the picture.



What risks to the baby's safety do you see in this picture? Select 'Yes' if the item is a risk in this picture and select 'No' if the item is not a risk or not applicable to this picture.

1. The baby is placed to sleep on his or her stomach or side. Yes No
2. The baby is placed to sleep on a couch, a chair, or an adult bed. Yes No
3. The baby is put to sleep on the same surface as another adult, child, baby, twin, or pet. Yes No
4. The mattress is loosely fit in the crib (for example, gaps on the ends, sides, or edges of crib). Yes No


UWM Research Foundation Samples of Training Program with Feedback













- After instruction, parents are tested in the set up of a safe infant sleep environments

Create infant sleep space

Please answer the question below to the best of your knowledge.


Click on, then place the surface your baby sleep on.



 Adult Bed.	 Pack and Play.
 Bassinet.	 Baby Swing.
 Chair.	 Dresser Drawer.
 Child's Bed.	 Pepi-Pod.
 Couch.	 Side Car.
 Crib.	 Floor


Create infant sleep space

ONLY USE THE "NEXT" BUTTON. DO NOT USE BROWSER "FORWARD" OR "BACK" BUTTONS.



Click on, then place the bedding you would like to use.

 Blanket

 Top-sheet

 None

Congatulations!

Great job! Bedding increases the risk of sudden infant death syndrome (SIDS).

OK



- Our program can increase parent's safe infant sleep awareness and improve their ability to effectively implement proper AAP guidelines.
- This training program can become an essential step in child birth classes nationwide, replace typical educational pamphlets, and become the standard of care used in hospitals, pediatricians' offices, and online!



- **Dr. Jillian Austin** is a graduate from the health psychology & behavior analysis doctoral program at the University of Wisconsin-Milwaukee. She's worked at the Children's Hospital of Wisconsin and her pediatric psychology post-doctoral fellowship is at Nemours Children's Specialty Care in Jacksonville, FL.
- In addition to clinical research on public perceptions of pediatric chronic illness, her research also focuses on reducing infant death related to unsafe sleep environments.
- Dr. Austin is published in the Journal of Applied Behavior Analysis, Global Pediatric Health, and the Journal for Autism and Developmental Disorders. She has also presented at the Association for Behavior Analysis International Conference and the Society of Pediatric Psychology Annual Conference.



Teaching Parents to Create Safe Infant Sleep Environments

(OTT ID 1468)

For further information please contact:

Jessica Silvaggi
Senior Licensing Manager
1440 East North Ave.
Milwaukee, WI 53202
Tel: 414-906-4654
Jsilvaggi@uwmfdn.org