
For Immediate Release 12-8-15

Detroit Lullaby Project: Can singing soothe infants and parents?



Carolyn Dayton

DETROIT – A research project is underway to test whether singing can decrease stress responses in parents and infants. Twenty pairs of new parents, at risk of chronic stress from situations like poverty and community violence, will sing to their 6 to 9-month-old infants in a laboratory setting. There, heart rate, breathing and perspiration will be measured to see if signs of stress decrease in infants and parents during active singing. If so, a “Singing to Soothe” intervention could become a low-cost, easy-to-teach public health intervention.

The project won a one-year, \$49,000 Research Enhancement Award in Arts and Humanities from Wayne State University’s Division of Research. These awards provide seed money to outstanding research protocols within the university to prepare them to seek external funding. Wendy Matthews, Ph.D., an assistant professor of music education at Wayne State, is the principal investigator. Assisting Matthew is co-PI Carolyn Dayton, Ph.D., (School of Social Work) and co-investigator Valerie Simon, Ph.D., (Dept. of Psychology), both jointly appointed at Merrill Palmer Skillman Institute.

At a biological level, chronic stress over time takes a heavy toll on people and can impair physical, psychological and social functioning, including the ability to parent. “We know music has calming effects on individuals from infancy through older adulthood. It’s also free,” Dayton said. “We think music may help parents, especially those under stress, feel calmer and be better able to bond with their babies.”

The project was inspired by Detroit’s rich music tradition and Dayton’s recent prenatal study of parents-to-be. Her Baby on Board protocol recruited 50 expectant couples living under environmental stresses. They completed questionnaires, then were asked to comfort a crying doll while their heart rate and perspiration were measured to detect physiologic arousal. Dayton’s team wanted to better understand how fathers (especially low-income urban men) cope with stressors and engage in parenting.

Dayton also collaborated recently with Matthews and doctoral student Laurel Hicks, to examine the intergenerational use of music. Parents described the use of music in their childhoods, music in their current lives, and plans to use music with their babies after birth. Most couples planned to expose their infants to music, but to passively play music on phones and electronic devices rather than actively sing. Research has found that active music making between parent and child can improve children’s cognitive, communication and motor skills.

“Results from that study are mainly positive in that parents view music as central to their childhoods and want to pass this positive legacy on to their children,” Dayton said. “The passive way they plan to do this, however, is less than ideal.” The Lullaby Project plans to recruit from a similar group of at-risk parents. Parents will sing two songs to their infant, one they choose and a standardized song (*Twinkle, Twinkle, Little Star*). Physiological arousal will be recorded for both parent and infant. Video and audiotapes will also be analyzed for parent/infant interactions and musical attributes (e.g., pitch, tempo, text). Researchers expect that the act of singing will physically calm the infant and, in turn, calm the parent. “If we can show parents that active singing is really good for their own mental health and for their babies,” Dayton said, “we may have the makings of a low-cost and effective early intervention.”

*The Merrill Palmer Skillman Institute for Child & Family Development promotes and improves the well-being of children and families across the lifespan through research, education and outreach. The institute is part of **Wayne State University**, a premier urban research institution offering more than 360 academic programs to nearly 26,000 students.*