

Olivia Mangual

Research Project Evaluation

Tap To Togetherness describes how families can learn positive family and child development skills using tap dance for family engagement. It focuses on resources for families and collaborates with the Parents as Teachers Program. Engaged activities include bi-weekly tap dance sessions for children ages birth to Pre-Kindergarten and their families. These sessions encourage family interaction, challenge body movement coordination, facilitate adult and child listening skills and discipline, and encourage family relationships. Lesson plans have been developed with the following concepts as the primary focus; we enhance adult-child engagement, increase positive family development, assess and improve body movement and coordination, identify sensory needs and collaborate on ways to meet children's sensory needs through tap dance sessions, and strengthen family relationships. All of these developmental processes are measured using both qualitative and quantitative methods. (Pentz, 2017)

Throughout the semester I worked with Julie L. Pentz, primary investigator of the Tap to Togetherness research project, coding data that is collected during our Tap To Togetherness sessions. This data (video collection) continues to be coded by both graduate and undergraduate researchers, using the Observational System for Recording Physical Activity in Children-Preschool. The *OSRAC-P* Coding System was initially developed in 2002. It is a combination of three different observational systems, the *CARS* [by Jackie Puhl et al.], the *CASPER II* [by William H. Brown, Samuel L. Odom, Ariane Holcombe, and Grant Youngquist for the Early Childhood Research Institute on Inclusion (ECRII) which was funded by the Early Education Programs for Children with Disabilities (EEPDC) of the U.S. Department of Education (Grant #H024K40004)], and the Observational System for the Environmental Determinants of Physical Activity in Preschool Children Study [which was funded by Gerber Foods]. William H. Brown, M. João Almeida, Karin A. Pfeiffer, and Kerry L. McIver made the modifications and developed the *OSRAC-P* during the summer of 2003, while funded by the National Institutes of Health (NIH), National Institute of Child Health and Human Development (NICHD, Grant #R01 HD43125-01). Jon Tapp developed the Interval Manager System (*INTMAN*) for the Dell Axim X5 handheld computers. Over the course of 2 years the research team has collected 96 films equaling 2,016 minutes of data of our human subjects (families). Using the *OSRAC-P* Coding System I spent 30 hours coding films. Once I was able to identify which child to focus on, I watch him/her for the duration of the session. To explain this method of coding in simple terms, I watched the child for 5 seconds with the coding categories that were given to me from the manual and I determined which category the behavior fell into. At 30 seconds of the video, I would select the most appropriate code from each of the eight categories. The categories included physical activity level, physical activity type, location, indoor educational/play context, outdoor/gym educational/play context, initiator of activity,

group composition, and prompt for physical activity. One twenty-minute Tap To Togetherness session would require approximately two hours of coding. In addition to the coding that I engaged in and completed, our data collection expanded to accelerometer data collection. An **accelerometer** is an electromechanical device used to measure acceleration forces. Such forces may be static, like the continuous force of gravity or, as is the case with many mobile devices, dynamic to sense movement or vibrations. Acceleration is the measurement of the change in velocity, or speed divided by time. The combination of both data sets will offer us a variety of data that will then be published in kinesiology and human development journals.

Additionally, 12 hours involved field research. The field research involved the Tap To Togetherness sessions that are offered to the families in the Parents as Teachers program. Each session is approximately 20 minutes; there is a single leader doing simple tap and gross motor movements to get the kids and their families excited and moving. Watching the families grow closer together throughout the session is the best part of Tap to Togetherness. Often, I see young children smiling, playing, and having a blast tap dancing and moving with their parents and/or grandparents. Watching kids grow from being extremely shy to wanting to hold your hand every step of the way is so heartwarming.

A complete release of data will be finalized in early 2018 and at that time the scholarly research that has been taking place will be formalized into scholarly articles that are suitable for submission. The research team includes faculty, PhD, and undergraduate students from the Departments of Kinesiology, Human Nutrition, Family Studies, Early Childhood Development, and School of Music, Theatre, and Dance. We expect to submit at least one article to the Journal of Dance Education Special Issue: Dance and Work Research in Dance Education with a submission deadline of May 15, 2018.

Pentz, Julie L. "Tap to Togetherness Abstract." 2017.