Children’s Happiness Integrative Music Project (CHIMP)


Goff, R., Kahn, S., Morgan, L., Bakan, M., Koen, B., Koyblarz, F., & Bakan, M.
Abstract

This study reports on the continuing development of a medical ethnomusicology project for children with Autism Spectrum Disorders (ASD). This research program is a collaborative endeavor of the Florida State University Colleges of Music and Medicine, and the FSU Center for Autism and Related Disabilities, which aims to benefit children with ASD through hands-on, child-directed, improvisatory musical play in a safe and nurturing environment. Central to creating a healthy environment is a core concept of our research group that focuses on the children’s abilities rather than so-called disabilities. These individual abilities are key to understanding how children with ASD create and integrate their senses of place and identity within socio-cultural constructs that are most often disabling to them, and which compound their impairments. The Exploratory World Music Playground, which features modified Balinese gamelan and other world music instruments, was constructed as a distinct place for participants to experience meaningful and positive social interaction and exploration. The place is not only distinguished in the material content of the instruments, but most importantly in the mental space of researchers and parent participants, who approach music-play sessions with an attention to children’s abilities. These abilities were measured using a modified coding system. Given that children with ASD are so variable in their presentation, these being no exception, the preliminary data shows interesting similar patterns of both approach and avoidance behaviors in interaction skills across participants and sessions.
What is ASD?

- Autism Spectrum Disorder (ASD) is an umbrella term encompassing several distinct but broadly overlapping conditions.

- The unifying symptomatic profile of ASD conditions is characterized by pervasive developmental impairments in the areas of reciprocal social interaction and communication skills (verbal and nonverbal).

- Closely related to such impairments are difficulties developing and maintaining friendships among peers, as well as strained relationships with parents and other family members, all of which can lead to a host of health problems, unhappiness, feelings of isolation, depression, and stress (Myles, 2003).
• Music-based interventions are highly beneficial for people with ASD (Wimpory et al., 1995; Kiellinen et al., 2002; Darrow & Armstrong, 1999; Whipple, 2004; Aigen, 2002; Gunsberg, 1998; Edgerton, 1994)

• Measurement and increase of happiness indices for people with disabilities (Green & Reid, 1996; Helm, 2000; Ivancic et al., 1997; Smith et al. 2005)

• "We are seeking, in the widened sense of the term ['conversant']” (Geertz 1973:13; Ochs & Solomon, 2004; Ochs et al., 2004)

• The Ethnomusicological Approach—combining musicological and ethnographic components within a broadly interdisciplinary framework (Moreno, 1988; & Stige, 2002)
Purpose

• Music-based experience of social interaction will transfer to other life contexts

• Coding system to cultivate and learn how to assess "conversation" especially as it relates to happiness and approach vs. avoidance behaviors

• Provide research on integrating world music and improvisation-based interventions
Hypothesis

- Children who participate in the study would experience an increase in approach behaviors and a decrease in avoidance behaviors.

- Children who participate in this study would experience increased happiness and decreased unhappiness through developing meaningful friendships with each other, and with their co-participant parents.

- Coding System would provide a tool to assess "conversation" especially as it relates to happiness and approach vs. avoidance behaviors.
Participants

- Three “high-functioning” children diagnosed with ASD
- Ranging in age from four to eight years old
- One parent/guardian of each child is co-participant with his/her child in music-play sessions
- Participants were recruited from the Center for Autism and Related Disabilities Florida State University
- Children with particular sensitivities to sound were not included
Setting

• The study took place in the FSU Exploratory World Music Playground facility (E-WoMP) (College of Music at Florida State University)

• A range of traditional, hand-crafted instruments from Southeast Asia (Indonesia), West Africa (Ghana), and other parts of the world
Procedures

- Children direct the course and flow of improvisational music-play
- Following rather than leading, responding rather than directing, integrating rather than "teaching"
- Musical/non-verbal communication is privileged over verbal communication
- Parents/guardians are free to participate fully in the music-play activity
- Facilitators serve as musical bridges of communication between participants
- Caregiver interviews on children’s interactions outside of musical environment
- Sessions videotaped and analyzed through coding system (Modified coding system: Smith, A., Bihm, E., Tavkar, P., & Sturmey, P., 2005)
## CHIMP Coding Form

**Observer:** ______________  **Child:** ______  **Date:** ______  **Session:** ______  **Time:** ______

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Coding System: Key

Child Responses:
- PB = Positive Behavior
- NB = Negative Behavior
- H = Hands
- B = Body
- F = Face
- V = Voice
- I = Instrument

Participants:
- M = Mother
- B = Bakan
- K = Koen
- C1 = Child 1
- C2 = Child 2
- C3 = Child 3
- OA = Other Adult
Comparison of Approach and Avoidance Behaviors for Participant 1 Across Sessions 1-6

Sessions 1-6

Sum of Behaviors Exhibited

Approach Behaviors
Avoidance Behaviors
Comparison of Approach and Avoidance Behaviors for Participant 2 Across Sessions 1-6
Comparison of Approach and Avoidance Behaviors for Participant 3 Across Sessions 1-6

- **Approach Behaviors**
- **Avoidance Behaviors**

Sessions 1-6:
- S1: 86
- S2: 88
- S3: 94
- S4: 75
- S5: 110
- S6: 82

Graph showing the sum of behaviors exhibited across sessions 1-6.
Conclusions

- Each of the 3 participants demonstrated similar patterns of both approach and avoidance behaviors across sessions.
- The frequency of approach behaviors varied considerably across sessions and participants.
- Avoidance behaviors remained low and relatively stable across all sessions.
Interpretations

- Given that children with ASD are so variable in their presentation, these being no exception, the 3 participant’s similar patterns of both approach and avoidance behaviors across sessions is interesting.

- The data do indicate that the sessions went well (e.g. the children probably enjoyed the sessions and, perhaps, enjoyed being together).

- Further research is warranted with the use of the Hands-on World Music Applied Research Program for Children with ASD and their Families.
Practical & Theoretical Implications

• Could provide further information on the beneficial effect of the Children’s Happiness Integrative Music Project on children’s with ASD interacting abilities

• Could result in classroom environmental manipulations to enhance performance

• Provides protocols for studying children interactions

• May provide insights on cross-disciplinary research across music and health sciences
References