

Therapeutic Function of Music

Client Background

- 21 year old male with Autism Spectrum Disorder
 - High Functioning
- **IMPROVE RECIPROCAL COMMUNICATION**

Musical Element	Theoretical Framework	Purpose	Description
Form	<ul style="list-style-type: none"> Those diagnosed with ASD perform equally with peers on explicit tasks, but significantly worse on implicit tasks 	<ul style="list-style-type: none"> Those diagnosed with ASD perform significantly better in well-structured environments 	Form will be predictable, AAA or ABA
Lyrics	<ul style="list-style-type: none"> Lyrics are a means of stimulating comprehension, speech and imagination Lyrics and melody are processed separately in the brain Combining a face singing the lyrics with the auditory improves word recognition in comparison to auditory alone 	<ul style="list-style-type: none"> Lyrics can provide prompts and instructions, model behavior, and convey ideas or stories Lyrics are easier to understand when client can see them being sung 	<ul style="list-style-type: none"> Instructions will be embedded in lyrics when appropriate SMT will face client Client can use lyrics as a form of self-expression
Melody	<ul style="list-style-type: none"> Singing (more than speaking) engages a bilateral reciprocal network between frontal and temporal regions, which contain some components mirror neuron system (MNS). A dysfunctional MNS underlies some of the language deficits in autism. Melody provides structure to organize, sequence, and remember verbal information Melodies that follow a predictable pattern, such as moving in half or whole steps, prevent over-arousal There is little difference in the way we perceive pitches in speaking and pitches in melody 	<ul style="list-style-type: none"> Melody that follows contour of spoken word aids in language development Melody that follows a predictable pattern increases participation, reduces frustration, and aids in the processing of verbal information 	<ul style="list-style-type: none"> Melody will mimic contour of spoken word Melody will follow a predictable pattern, moving in half or whole steps

Synthesis

- Form should aid creating **predictability**.
 - Verse, chorus, verse
- SMT should **face** client when singing lyrics. **Instructions** can be **embedded in lyrics** and client created lyrics can be used as a form of **self-expression**.
- Melody should follow **contour of spoken word** and **move in a predictable pattern**, using half or whole steps.

Improve reciprocal communication

MUSIC-BASED INTERVENTION PRESENTATION