Interpreting the Communicative Behaviors of Clients with Rett Syndrome in Music Therapy: A Self-Inquiry

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ABSTRACT

The purpose of this study was to examine the ways in which I interpret the communicative behaviors of children with Rett Syndrome. In so doing, the following research questions were asked: 1) How do I interpret the communicative behaviors of clients with Rett Syndrome with regard to their intentionality? And, 2) How do I use these interpretations to guide my clinical decision-making? Videotapes of individual music therapy sessions with the present researcher and three girls with Rett Syndrome served as data. Transcripts of each session were made and divided into communication units, based upon significant exchanges between client and therapist. Categories of "therapist's interpretations", "therapist's responses" and "therapist's process" emerged and were refined. Based upon these categories, I discovered that I used a cyclical interpretive process to understand the communicative behaviors of these girls, as well as to guide my clinical responses.

INTRODUCTION

Rett Syndrome (RS) is a neurological condition that is linked to the X chromosome gene MeCP2 (Amir, Van den Veyver, Wan, Tran, Francke & Zoghbi, 1999) and affects as many as 1:10,000 female newborns (International Rett Syndrome Association, n.d., *a*). It was first observed in 1966 by Andreas Rett, who differentiated this disorder from autism. It was further defined and described by Hagberg in 1983 (Perry, 1991). The severe regression of skills, including verbal language, and purposeful hand use, severely limits the communication skills of clients with RS. Because of this, eye gaze, non-verbal gestures, and facial expressions are often relied upon by the caretakers of these individuals as primary modes of communication (International Rett Syndrome Association, n.d., *b*). Interpretations of these non-verbal modes of communication are employed to gain an understanding of the individuals' intent, although some debate in the speech/language and developmental disability research exists regarding whether the cognitive abilities of these clients allow them to demonstrate intentional communication (Budden, Meek, & Henighan, 1990; Sandberg, Ehlers, Hagberg & Gillberg, 2000; Woodyatt & Ozanne, 1992a, 1992b, 1993, 1994).

The use of music with girls with RS has been supported by the International Rett Syndrome Association (Hill, 1997; International Rett Syndrome Association, n.d., *c*), and Dr. Rett recommended music therapy as a helpful intervention for reducing stereotypical hand movements, reaction time, and muscle tension, and for increasing attention and sensory stimulation (A. Rett quoted in Webb, 1985). Comments regarding the preference for music of clients with Rett Syndrome are also present in the genetics and developmental disabilities literature (Perry, 1991; Wesecky, 1986; Yasuhara & Sugiyama, 2001). Music therapists have therefore been called upon to work with clients with RS, and music therapy interventions are reported to have been used since 1972 (Wesecky, 1986). In addition to addressing hand use and physical skills (Hadsell & Coleman, 1988; Wylie, 1996), music therapists have discussed

various interventions that promote the development and maintenance of communication skills through improvisation, instrument choice, song choice, vocal play, and singing, all of which provide opportunities for verbal and non-verbal communicative interactions (Elefant, 2001a, 2001b, 2005; Elefant & Lotan, 2004; Wigram, 1991). While some music therapy research has focused on the communicative intentionality of clients with RS (Elefant, 2001b, 2005), no research exists that explores how music therapists interpret the communicative behaviors of clients with RS.

As a music therapist working with children with special needs, I have had the opportunity to work with several girls with RS and I have been struck by their enjoyment of and motivation by music. While they have many physical similarities, I have found each of their personalities to be very unique. Because I have developed therapeutic relationships with each of these girls throughout our sessions, at various moments I have felt I understood what they were communicating to me, despite their physical and verbal limitations. Because I wanted to understand this experience more deeply, I decided to undertake this study, which was originally completed as a Final Project for the Master of Music Therapy program at Temple University.

RELATED LITERATURE

Background Information

Rett Syndrome is the second most commonly occurring developmental disability in women (Ellaway & Christdoulou, 2001). While previously it was believed that it effected only females, recent studies have shown that males also acquire RS, but rarely develop past the early fetal stages. Diagnostic criteria for RS include decelerating head growth, loss of purposeful hand skills, loss of speech, stereotypical hand movements (i.e. hand washing, wringing or tapping), gait difficulty, and posture difficulty. Supportive criteria include hyperventilation or breath-holding, air swallowing, teeth grinding, scoliosis or kyphosis, laughing and/or screaming spells, and the use of “eye pointing” or eye communication through gazing at a desired object, etc. The development of seizures/epilepsy is also commonly found in clients with RS (Hagberg, 1997, 2002). Several variants of classical RS exist, including Forme Fruste RS, Congenital Onset RS, Infantile Seizure Onset RS, Late Regression RS and Preserved/Regained Speech RS (Hagberg, 2002). This paper will focus mainly on information related to the classical presentation of RS.

The progression of RS was further classified into four interrelated stages, summarized in Table 1 (Hagberg, 1997, 2002; Hagberg & Witt-Engerstrom, 1986). Stage I, “Early Onset Stagnation” includes initial developmental delays. Stage II, “Developmental Regression,” results in loss of motor and communication skills. Stage III, “Psudostationary Period,” is considered a “wake-up” stage in which clients demonstrate maintained ambulation, and some recovery of communication skills. Finally, Stage IV, “Late Motor Deterioration,” begins when ambulation ceases or when individuals develop complete wheelchair dependency. Life expectancy in RS is approximately 40 years of age, with reports of individuals living into their 50s (International Rett Syndrome Association, n.d., *d*; Jacobsen, Viken & Von Tetzchner, 2001). Although it was previously considered to be degenerative, recent studies have suggested that progress and maintenance can be achieved throughout the life of a person with RS (Cass,

Reilly, Owen, Wisbeach, Weekes, Slonims, Wigram, & Charman, 2003), suggesting the importance of interventions including medical treatment, special education, occupational therapy and physical therapy, speech therapy, music therapy, and hydrotherapy (International Rett Syndrome Association, n.d., *e*).

Table 1. Clinical Stages of Rett Syndrome

Stage	Age	Duration	Characteristics
I. Early Onset Stagnation	5 mos. to 1.5 years	Weeks or months	-Delayed developmental progress -Dissociated development
II. Developmental Regression	1-4 years	Weeks-1 year	-Loss of previously acquired fine and gross motor and communication skills
III. Pseudostationary	Completion of stage II	Years-decades	-Slow neuromotor regression -Some communication skills regained -Maintenance of ambulation in some individuals
IV. Late Motor Deterioration, 2 subgroups: A. Previous walkers, now non-ambulant B. Never Ambulant	When ambulation ceases	Decades	-Decreased mobility -Scoliosis development -Improved emotional contact

Adapted from Hagberg & Witt Engerstrom 1986; Hagberg 1997, 2002

The current speech therapy, assistive technology, music therapy and developmental disability literature describe the spectrum of understanding of the communicative abilities of individuals with RS. Music therapy research has not specifically addressed the process used to interpret the communicative behaviors of clients with RS. Some studies have, however, begun to demonstrate communicative intentionality and musical preferences among these clients, as well as suggested implications about the interpretive processes used (Elefant, 2001b, 2005). While some communication and developmental disability studies have suggested that few clients with RS communicate with intentionality (Budden, Meek, & Henighan, 1990; Sandberg et al., 2000; Woodyatt & Ozanne, 1992a, 1992b, 1993, 1994), studies of alternative and augmentative communication have suggested that clients with RS communicate clear choices and preferences, are able to utilize assistive technology, and can participate meaningfully in

their school and home environments (Hetzroni, Rubin & Konkol, 2002; Koppenhaver, Erickson, Harris, McLellan, Skotko, & Newton, 2001; Koppenhaver, Erickson and Skotko, 2001; Sigafoos, Laurie, & Pennell, 1995, 1996; Skotko, Koppenhaver and Erickson, 2004; Van Acker & Grant, 1995; Watson, Umansky, Marcy & Repacholi, 1996). Despite the communicative behaviors and anecdotal evidence of communication reported in these studies, few begin to approach a discussion of the therapists' role of the process of making communication interpretations with clients with RS. Woodyatt and Ozanne (1992a, 1993) studied six girls with RS over a three year period in order to describe in detail their communicative behaviors and communicative development using standardized measures. Additionally, they presented a case study of a 4-year old with atypical RS (1992b). While results in all three studies indicated severe limitations in intentional communication, they suggested the importance of caregiver training in recognizing and interpreting possible communicative behaviors.

Interpretive Processes in Music Therapy

The non-verbal means of communication used by clients with RS, including facial expressions, vocalizations, gestures, movement, and eye gaze (Sandberg et al., 2000), have been addressed in music therapy in order to maintain and develop social interactions (Hadsell & Coleman, 1988; Wigram, n.d.), choice making (Hadsell & Coleman, 1988; Elefant, 2001b, 2005; Elefant & Wigram, 2005), and the expression of emotions (Hill, 1997; Elefant, 2001a; Elefant & Lotan, 2004; Wigram, n.d.; Wigram & Lawrence, 2005). The interpretative processes used to understand these choices, interactions, and emotions is implied but not specifically described these studies.

Social interaction among clients with RS has not been specifically addressed in music therapy research, although several studies have mentioned this goal area in music therapy. In a case study, Wigram (1991) described the music therapy process of a nine-year-old girl with RS who initially required a highly structured and directive approach in MT, but this need decreased over time, allowing for increased opportunities for interpersonal interactions with the therapist. These interactions were characterized by increased playfulness, increased tolerance for cooperative instrument playing and, at the same time, they accompanied an overall decrease in stereotypic hand patterns and avoidance of contact. Hill (1997) briefly described the use of music to help a client increase her vocalizations, which ultimately became more communicatively meaningful. In both of these cases, while meaningful communication and expression of emotions are described, the process by which communication was interpreted, understood, and acted upon was not clear.

In one of two studies that have addressed the area of choice making of clients with RS in music therapy, Hadsell and Coleman (1988) reported that clients with RS demonstrated preferences for specific songs and instruments, and recognition of preferred songs in music therapy. The process used to understand these preferences was not described, implying that some interpretation of the communicative behaviors of the clients with RS took place for the authors to draw the conclusion that songs and instruments were, in fact, preferred.

In another study using a single subject, multiple probe design, Elefant (2001b, 2005; Elefant & Wigram, 2005) studied song selection of seven clients with RS, ages 4-10, to determine their ability to communicate intentionally. Stable baseline word or picture symbol

responses were obtained, indicating that the subjects understood song titles for eighteen familiar and unfamiliar songs. Each girl then participated in individual music therapy sessions that incorporated choice making between two or four songs using each girl's preferred method of choice (i.e. touch, eye gaze, etc.). After the initial choice, the order of the symbols/words was changed, and the therapist asked the client to confirm the song, which was then sung to the child. Results indicated that all participants demonstrated the ability to make and confirm song choices, to maintain this ability over time. The researchers also discovered that learning in the intervention (music) phase took place faster than in the baseline (no music) phase. The study findings indicated that communication can be improved by the use of songs in music therapy, and that all subjects demonstrated personal preference, intentionality and choice making. Importantly, careful interpretation of the subjects' choices was critical to understanding the client's song selection, and this was only sung after the child had confirmed by their choice. Therefore, this process ensured that the songs were not selected by chance. The support for the existence of musical preferences among clients with RS (see also Merker, Bergstrom-Isacssin, & Engerstrom, 2001) provides evidence for the need for increased understanding of the process of communication interpretation.

The area of emotional expression is addressed in a case study of a 9-year-old girl with RS, in which Elefant and Lotan (2004) outlined, described, and provided rationale for dual music and physical therapy intervention. In addition to providing increased motivation for the client to participate in less-preferred physical interventions, the authors described their receptive preparation of the client for transitions throughout the session, the use of music to structure the session and the use of song selection. Both the physical and emotional states of the client were considered and interpreted throughout, and these were used by the authors to provide a supportive environment, and to make treatment and pacing decisions. Ultimately, this interpretive process increased the client's tolerance for physically difficult interventions.

Wigram (1991) stated that the emotional expressions of a client with RS ranged "from frivolous to furious, from happy to sad, from withdrawn to engaging, sometimes in the space of ten minutes" (p. 49). Wigram (2002) also suggested that the use of musical elements of volume, timbre, and frequency could provide opportunities for expression due to the limited nature of communication of girls with RS. Further, he stated that the act of making music could allow a client with RS to "communicate her anxiety, her fear, her happiness and joy." In a case example, Wigram and Lawrence (2005) suggested that in addition to assisting in the multidisciplinary assessment of a 6-year-old girl with RS, music therapy revealed underlying communicative responses, intentionality, and emotional expression. Further, Hill (1997) described the use of music for both holding and expression of a client's emotions. Again, one might deduce that an interpretive process occurred among these researchers/therapists who experienced and wrote about the emotional states, expressions, and use of music by clients with RS, yet, this process is not described in detail.

In a presentation to parents of clients with RS, Elefant (2001a) highlighted the notion, related to humanistic psychology (Maslow, 1968), that the development of trust and rapport in the therapeutic relationship precedes the development of meaningful communication. She stated that the acceptance of the emotional expression of a client with RS can provide a meaningful, safe environment where learning can occur, and confidence and desire for increased

independence in communication may result. This also suggests the importance of ensuring "accuracy" when interpreting a client's communications (see also Meadows, 1995).

It is evident from the existing music therapy literature that music therapists interpret the communicative behaviors of clients with RS to gain insight into their interpersonal interactions, choices, preferences and emotions. It is important to note that little is written about this interpretative process, despite its necessity due to the physical and verbal limitations of these clients (Sandberg et al., 2000).

Conflicting Viewpoints on Communicative Intent

While music therapists who have written about their clinical work with clients with RS describe their interpreting communicative behaviors as intentional, there is some debate in the present literature regarding the extent to which individuals with RS communicate intentionally, if at all. While some studies have shown that clients with RS have minimal intentional communication (Budden et al., 1990; Sandberg et al., 2000; Woodyatt & Ozanne, 1992a, 1992b, 1993, 1994), the validity of these results has been questioned due to difficulties which arise when using standardized tests and measures with individuals with limited physical skills, etc. (Budden et al., 1990; Sandberg et al., 2000; Woodyatt & Ozanne, 1992a, 1992b, 1993, 1994). This inconsistency supports the importance of the nature of communicative interpretation.

Although the findings of these cognitive and communication studies indicate that individuals with RS demonstrate low levels or the absence of communicative intent, several additional results and conclusions from these authors indicate areas of skill and recommend interventions. Sandberg, Ehlers, Hagberg and Gillberg's (2000) standardized results indicated that interpersonal relationships rated higher than play and leisure or coping skills among their subjects, and they recommended that interventions should focus on observing, developing and maintaining communicative actions spontaneously used by girls with RS. Budden, Meek, and Henighan (1990) pointed out that early intervention in communication skill maintenance is warranted, as the subjects in their study with the greatest verbal skills were those receiving intervention. Additionally, Woodyatt and Ozanne's results (1993) indicated that some subjects demonstrated improvement in social interaction over time. These recommendations support the assumptions of communicative intent and therefore the interventions employed by music therapists to address improving communicative behaviors of clients with RS.

Clinical guidelines for the process of interpreting communicative behaviors of clients with RS begins to be addressed by Woodyatt and Ozanne (1992a, 1993, 1992b) with regard to consistency of interpretations, the growth of and training in the interpretation process over time, and the importance for caregiver awareness of non-traditional forms of communication. Woodyatt and Ozanne (1992a) observed consistent interpretations among caregivers, parents and researchers of the communicative behaviors of clients with RS. The communicative behaviors demonstrated included vocalizations, crying, eye gaze, facial expressions, breathing and touch. These were observed to have functions of social interaction, requests, refusal, greetings, and emotional expression. In another study (1993) they observed that while the subjects maintained similar communicative behaviors over time, the number of these behaviors interpreted as communicative increased over the study period for four of the six of their subjects. They recommended that people working with girls and women with RS should be alert

to gestures, non-verbal, and non-traditional forms of communication. In a third study, (1992b) they recommended that intervention should include instructing caregivers in understanding and interpreting communicative behaviors of clients with RS. These observations suggest that the process of reliably interpreting the communications of individuals with RS is an important and necessary part of the communication process, and that this process should be considered when engaged in music therapy interventions with this population.

Alternative forms of communication have also been studied with clients with RS. Results of studies examining choice making and selection of symbols and items (Sigafoos et al., 1995), and the use of aided communication, communication boards and switch activation (Sigafoos et al., 1996), supports the existence of preference and intentionality among clients with RS. Sigafoos et al. (1995) also suggested that the absence of a clear choice does not indicate a lack of preference among girls with RS. Studies addressing the use of computer technology have considered symbol discrimination and selection (Hetzroni et al., 2002), requesting of preferred items (Van Acker & Grant, 1995), and ability to control hand use to access preferred computer images (Watson et al., 1996), indicating that clients with RS have demonstrated the ability to learn and discriminate symbols with increasing accuracy, request preferred items, and use their hands to manipulate simple computer controls. Studies of communication in storybook reading of six girls 3-7 years of age with RS and their mothers indicated increased frequency of labeling, use of multiple forms of communication, and familiarity with books, ultimately indicating that intentional communication was taking place (Koppenhaver et al., 2001; Koppenhaver, Erickson & Skotko, 2001; Skotko, Koppenhaver & Erickson, 2004).

The improvements in social interaction and communication among clients with RS over time, and the use of caregiver interpretation in understanding the communications of clients with RS suggest that the assumptions of communicative intent made by music therapists about these clients are warranted. The wide range of communicative styles reported to be used successfully by clients with RS also suggests that the interpretative processes used by caregivers, teachers and therapists is highly individualized.

Qualitative Research Methods

While there are some suggestions that clients with RS do not have the ability to communicate intentionally, the assumption of communicative intentionality, supported by research and anecdotal reports, have been made by music therapists addressing communication goals with this population (Elefant, 2001b, 2005; Elefant & Wigram, 2005; Wigram & Lawrence, 2005). Little attention, however, has been paid to examining the *ways* in which a client's communication has been interpreted in music therapy, despite the essential nature of this process in the course of each session. Therefore, the purpose of this study was to examine the process by which I interpret the communicative behaviors of three clients with RS. This research methodology may be understood as a type of first-person research, more specifically self-inquiry, by which the therapist-researcher examines herself under specific conditions in order to increase her understanding of a particular clinical phenomenon (Bruscia, 2005). This type of research is related to heuristic inquiry as described by Moustakas (1990).

Other examples of self-inquiry research in music therapy with children include the work of Wheeler (1999) and Meadows (1995). Wheeler (1999) studied her experience of pleasure while working with children with developmental disabilities (two of whom, coincidentally, were clients with RS). Videotaped sessions were analyzed to determine "exciting" moments, written descriptions were made, and categories and subcategories were then created. The resulting categories, indicating sources of the therapist's pleasure included intentionality, emotionality, communication and mutuality.

Meadows (1995) used self-inquiry to answer the question "How do I understand a child's experience in music therapy?" He studied a videotaped session with a client with multiple and profound disabilities, with whom he used a "high level of interpretation." He created a transcript of the session, and he also interviewed a colleague familiar with the client as they watched the videotape. Among his conclusions he reported that the experience of "being with the child" represents an alternative understanding as compared to observing a child, and that the experience of the therapist "cannot be effectively separated from what is perceived as the child's experience" (p. 7). Because interpretation of the experience of a non-verbal client was a large part of the focus, this study is of particular interest. Drawing upon this, the present study will adopt some methodological similarities, including the use of heuristic research, videotaped music therapy sessions, and the transcription of sessions.

Therefore, the purpose of this study will be to examine the process by which one music therapist interprets the communicative behaviors of three clients with RS. The following research questions were developed:

- How do I interpret the communicative behaviors of clients with RS in music therapy with regard to the nature of their intentionality?
- How do I use these interpretations to guide my clinical decision-making?

METHOD

Setting and Participants

Three children with RS participated in this study: Aileen, Bethany and Courtney (pseudonyms). At the time of data collection, Aileen was 5 years old and had been seen in music therapy with the present researcher for one and one half years. Aileen lives with her parents and ambulates independently. Bethany was 10 years old and had been seen in music therapy by this researcher for 2 years. She is able to ambulate with assistance at the waist. Courtney was 9 years old and had been seen in music therapy by this researcher for 3 years. Courtney is unable to ambulate and also has occasional seizures. All three children live with their parents and families and our music therapy sessions took place in their homes.

Procedures

After obtaining approval from the IRB at Temple University, informed consent and permission to videotape were obtained from the parents of each client. Either two or three sessions were recorded for each of the three participants. So as to capture a "typical" music therapy session,

there were no changes made to the session structure, musical experiences or interventions. Sessions with each of the clients were based upon goals addressing areas of communication, fine and gross motor skills, sensory processing, and academic skills. A variety of interventions were used including vocal and instrumental improvisation, pre-composed songs, structured instrumental playing, and creative movement. A humanistic approach to therapy was employed, for several reasons: 1) to complement behavioral goals and approaches that were often the focus of therapists and educators outside of the music therapy setting, and 2) the therapist's belief that this orientation allows for an open session structure in which the therapist can "follow the client's lead" spontaneously.

Data Collection and Analysis

Data collection and analysis for this first-person research employed an emergent design and proceeded according to the following steps:

1) Two or three sessions for each client were videotaped in their entirety by the therapist using a digital video camera and a tripod. Multiple sessions were recorded to ensure that the sessions that were recorded were "typical" of the researcher's experience of music therapy with each client, as well as to ensure that the full extent of communicative interactions and interpretation were able to be analyzed. Of the seven recorded sessions, a total of six videotapes were used for the study.
2) The sessions were then viewed and written transcripts were taken to fully document the therapist/client communication within the session. Initially, the transcripts were written in a structured way, documenting each client and therapist behavior, word, sound, communication, gesture, etc. It quickly became clear that this way of organizing the information did not seem to capture the essence of the interaction. Since it was important to understanding the interpretive process, a narrative style was employed, which was intended to clearly describe the client actions, behaviors, music and communications. All transcripts were then written in this manner, from the perspective of the therapist in order to provide rich description of the interactions. While writing the transcripts, attention was given to only include information that occurred during the session, as compared to including insights that the researcher had regarding these communications during this analysis process, therefore remaining authentic to the data. The session transcripts were then reviewed and instances of significant communication were noted. These instances were called "communication units" and they were defined by the presence of client responses or non-responses, therapist interpretations, and therapist decision-making. They often included multiple interpretations and communicative interactions. These units were then listed and numbered.
    a. For example, a communication unit from one of Courtney's transcripts appeared as follows:

       Courtney tape 1-unit 1: Courtney makes eye contact with me. She is breathing in alot, possibly swallowing air. She has done this before and it is sometimes because she is trying to respond. At other times, it is because she is overstimulated. I change from strumming to use a fingerpicking pattern rather

> *than playing chords that are louder. She makes eye contact throughout the song. She still seems to be having difficulty separating her hands so I hold her [non-dominant] hand. She responds immediately to this by reaching for the guitar. I praise her excitedly and she again smiles and vocalizes "heeh". At the end of the Hello song, she is smiling and I laugh a little bit. She then echoes.*

These communication units varied in size based upon the nature and length of the communicative exchange.

3) The communication units were then analyzed based upon the research questions. Transcripts were reviewed to answer my first research question "How do I interpret the communicative behaviors of clients with RS?" In order to determine how I interpreted these children's behaviors, I looked at each communication unit according to the type of interpretation I had made. These interpretations were listed for each communication unit across all of the transcripts. So, for the above communication unit (Courtney-tape 1-unit 1) I first wrote the following:

> *Interpretations: She is overstimulated; she is having difficulty with her hand; she feels happy; she feels proud*

After clarifying interpretations for two of the transcripts, I then looked at my research questions. In an effort to answer the second research question, "How do I use these interpretations to guide my clinical decision making?" I then followed a similar process with selected transcripts to understand the clinical responses that I made within each of these communication units. Continuing with the same example, this processed appeared as follows:

> *Responses*: *I slow down the music; I play more quietly; I give her physical assistance; I smile and show happy affect; I verbally praise her.*

Although both the above stages were essential in differentiating and defining my interpretive style, I felt that I had not yet answered either of my research questions. I had begun to create a list of my interpretations and responses, but not yet looked at the processes that determined the "how" I interpreted. I then decided to look more carefully at the processes that unfolded in each session. I went through each category in the initial transcripts with this in mind. I organized the interpretations and responses into three columns, including "process" as the third column, as shown in Table 2. I then continued in this manner with the balance of the transcripts using these three columns/categories: Therapist's Interpretation (I), Therapist's Response (R), and Therapist's Process (P).

Table 2. Example of Interpretation/Response/Process Organization

Interpretations	Responses	Process
• *She is overstimulated* • *She is having difficulty with her hand* • *She feels happy* • *She feels proud*	• *I slow down the music* • *I play more quietly* • *I give her physical assistance* • *I smile and show happy affect* • *I verbally praise her*	• *I observe her behavior* • *I think about my past experience with Courtney* • *I use my intuition*

4) Each category was then compiled and divided into subcategories according to similarities between examples within the categories. For example, within the "Interpretations" category, some of the subcategories were "Client's emotional states" and "Client's physical states". Tallies of each subcategory were then taken to give a relative sense of usage and frequency, rather than to indicate importance.
5) The categories were then examined collectively to increase the therapist's understanding of her interpretive processes and diverse ways of understanding the communication of girls with RS.

Ensuring Integrity

The following steps were taken in order to ensure the trustworthiness and integrity of the research findings. These steps are related to those suggested by Lincoln and Guba (1985).

1) Emerging transcripts, categories and subcategories were shared with the researcher's supervisor to ensure that the essence of the communicative interactions was being portrayed in the transcripts and that the categories and subcategories were created in a manner that allowed the communicative interactions to be fully understood.
2) Throughout this process, the emerging results were compared with the original videotaped data in order to ensure that the results were authentic to the actual process of therapy and client/therapist interaction that took place, as well as to the subject being researched.

RESULTS AND DISCUSSION

The purpose of this study was to understand how I interpreted the communicative behaviors of clients with RS, and how I use these interpretations to guide my clinical decision-making. These questions were important to me because of wide range of communicative styles of these children, and the difficulties in understanding how intentional their communicative behavior is.

The initial stage of data analysis involved examining the transcripts as a whole to determine if there were clear approaches that I used to interpret these communicative behaviors. It immediately became evident that each communicative behavior, when looked at in isolation,

was rendered relatively meaningless. It therefore followed that these communicative behaviors could only be understood within the *context* of the session, and through an understanding of the events that preceded and followed it. While I had initially intended to understand how I interpret each communicative behavior of client's with RS, it became clear that this was neither feasible nor desirable. This is, in and of itself, an important finding: My understanding and interpretations of the client's communicative behaviors is dependent upon the context in which they take place, and this context is subjectively experienced by the client and myself.

Based upon this understanding I began to select communicative units of various lengths and looked at each specifically with regard to the research questions. Upon this initial overview of the communication units, it became clear that in each unit I *assumed* the client's communicative intent, although the nature of the communicative intent could not be assured with any certainty. Therefore, the second finding of importance is: That I realized that I make assumptions about the client's communicative intent as the basis of my interpretive process.

It then seemed necessary for me to identify "what" I was interpreting in order to get to the "how" or process of interpreting or its effect on my clinical decisions. Therefore, the category "Therapist's Interpretations" emerged. After beginning this process with two of the transcripts, I then went back through and identified my responses to the client based upon these interpretations. The category "Therapist's Reponses" also readily emerged. These signified my two initial categories. As I looked more closely at these, I felt that an underlying process took place as I moved between interpretation and response, so a third category; "Therapist's Process" emerged. The balance of the communication units were then analyzed using the three categories: Therapist's Interpretations (I), Therapist's Responses (R), and Therapist's Process (P) as described in the method section. Each category, with its subcategories, will be defined and elaborated in the forthcoming sections.

Category 1: Therapist's Interpretations (I)

The first category, "Therapist's Interpretations", consists of the types of interpretations that I made about the clients' communications throughout our sessions. The subcategories that emerged were: the clients' feelings, the client's physical states, the client's receptivity/understanding, the clients' preferences and choices. The fifth subcategory was comprised of the experiences in which I was unable to immediately interpret what the client was communicating. Each subcategory is described below and is summarized in Table 3.

Table 3. Category 1: Therapist's Interpretation

Subcategory	Clinical Examples	Tally
A. The clients' feelings	She feels happy (10) She feels bored (2) She feels frustrated (1) She feels proud (1) She feels unhappy (3) She thinks this is funny (1)	26

	She feels impatient (1) She is connected (3) She feels angry (2) She is musically engaged (2)	
B. The clients' physical states	She feels over-stimulated (3) She is having trouble with her hands (1) She is tired (7) She is having trouble moving (1) This is hard for her (1) She needs the bathroom (1) She needs help (1) She is thirsty (1)	16
C. The clients' receptivity/understanding	She is paying attention (1) She understands what I am saying (3) She understands my directions (1) She is playing purposefully (4) She is moving purposefully (1) She is vocalizing purposefully (3)	13
D. The clients' preferences and choices	She likes the song (3) She likes the instrument (1) This is her favorite instrument (1) This is her favorite song (1) She likes this sound (1) She has made a purposeful choice of song (2) She has made a purposeful choice of instrument (1) I am sure that she has made a purposeful choice (3) She is trying to respond (2) She is playing a game (1) She wants to continue (2) She wants to play (1) She wants to change locations (1) She wants this instrument (2) She wants this book (1) She doesn't want my help (1)	24
E. Uncertainties	I'm not sure if that was a purposeful choice (2) I don't know what she means by that movement/gesture (1) I don't know what she means by that	7

	vocalization (2) I don't know why she isn't responding (1) I don't know what she needs/wants (1)	

The Clients' Feelings

The first subcategory of my interpretations was "The client's feelings". This is defined by my interpretation of how the client was feeling in response to me, the music and activities of the session, or to other factors. This type of interpretation involved my careful observations of the clients' affect, movements, vocalizations and eye contact, as well as my use of intuition and empathy. My interpretations of the clients' feelings also directed the session's pacing, music and activities.

An example of this kind of interaction is in a session with Bethany. We had just completed an instrumental experience and I was asking her some questions in order to determine the direction of the session. Bethany often answers questions by touching or gazing at symbols that say "yes" and "no."

> *I ask her if she would like to play the maraca, play the drum, play the piano, or dance and she reaches for "no" for each of these choices. This is accompanied by vocalizations, but I suspect she is only reaching for one side so I switch the symbols and she continues to select only on one side…then she puts her head down.*

When Bethany seemed to only select on one side, it indicated to me that she was having physical difficulty with crossing midline with her dominant hand, and it also indicated to me that I needed to use an alternate mode of questioning. Because she put her head down, I interpreted that she was also feeling frustrated. Based upon this, I changed the way I requested her to respond by giving her a choice of two preferred pop songs using a closer and larger symbol. She responded by choosing a song and participating actively in the song.

The Clients' Physical States

This subcategory is defined by my interpretation of how the client is feeling physically in response to me or the musical experiences. Involved in my interpretation of the client's physical states are close observation, experience, history with the client, knowledge of RS, and intuition. Trustworthiness with this type of interpretation is particularly important when working with clients with RS because their physical needs must be met prior to expecting them to participate in communicative and musical interactions. Because clients with RS typically cannot verbally communicate their discomfort and/or physical needs, it is important for the therapist or caregiver to understand and anticipate these needs. For example, I have observed these participants showing physical discomfort or fatigue by squirming, yawning or groaning. Others expressions of discomfort or fatigue are more nuanced. For example, Courtney indicated gastrointestinal pain or need for the bathroom by a specific gesture. Aileen indicated that she

was thirsty by walking towards and making eye contact with her cup. Courtney indicated that she was sensorily overstimulated by:

> *Making eye contact…she is inhaling a great deal and her hands are shaking…she has done this in the past and it is sometimes because she is trying to respond but can't because she is overstimulated.*

Because of this interpretation, I minimized my guitar playing style and provided physical assistance, resulting in Courtney's successful participation.

The Clients' Understanding

This subcategory is defined by my interpretation that a client understands what is happening in the environment, and/or what I have said or asked. This type of interpretation involves my close observation of the client's affect, gestures, and actions. This also involves my use of intuition. These interpretations led to my moving forward within the session, my continuing a musical experience with no further explanation, my scaling back physical assistance, and my continuing a musical experience as to allow the client to continue to participate independently. Further confirmation of the clients understanding of my words, directions or expectations seemed to be unnecessary during these times; these seemed to be moments in which it was clear that understanding was present. For example, in a session with Courtney, I was singing a song in which she completed phrases by reaching out and using the guitar. She was having long processing delays when she was not given physical assistance:

> *I hold up the guitar for Courtney to complete a phrase, but instead she vocalizes. I echo and incorporate this vocalization into the song. During the second repeat of the song, I sing a direction for Courtney to vocalize to complete the phrase. She immediately vocalizes, and then reaches out with two hands. She has a big smile on her face…I compliment her by saying "I like how you used your voice!" and she immediately vocalized again.*

This was a significant interaction as our sessions up to this point did not generally include vocal exchanges, and Courtney rarely vocalized in music therapy. Due to her apparent understanding of my direction to vocalize, I made similar requests in future sessions that she also responded to positively.

The Clients' Preferences and Choices

This subcategory was defined by my interpreting that the client had made an intentional choice, or that the client has a strong preference for an activity or song. This type of interpretation involved observing the client consistently responding positively or negatively (either though affect, gestures, aided communication, etc.) to a particular song or musical experience. Often an intentional choice made through eye gaze or touch might be later reinforced by laughter and

smiles. An example of this type of interpretation is with Courtney, who consistently selects and actively plays the drum, and often laughs and makes eye contact while I sing a song.

> *I ask Courtney if she would like to hear [her favorite song]. She immediately selects the "yes" symbol using eye pointing. She chooses an instrument…and plays the drum in different positions in space as I support her [non-dominant] hand. She is laughing and playing…*

I recall Courtney's positive reaction to this song several years ago. It was memorable in that she laughed loudly and for the duration of the song. Because of this, I have continued to introduce the song on occasion, often with a similar response.

Similarly, the modes and styles of communication that clients with RS use to make choices also become familiar over time. For example, Aileen and Bethany often use a combination of eye gaze and touch to make choices, Courtney frequently uses eye gaze alone because she requires more physical assistance to touch her choice. Consistent choices from a client for a particular song, instrument or experience also lead to my understanding of or interpretation of a client's preferences.

Uncertainties

This sub-category is defined by the instances in which I was unable, at least initially, to interpret the communicative behaviors of the participant. These were instances in which my past knowledge and experiences, client relationship, observation, and intuition did not seem to come together to help me interpret the client's behaviors. For example, in a session with Aileen, I had requested that she select an instrument:

> *I hold up the maraca and jingle bells so she can see them. She leans back and taps the jingle bells with her foot, then she reaches her hands out to keep her balance and taps the jingle bells in the process. I notice that the jingle bells are on her dominant, easier to reach side. I'm not sure if theses actions were purposeful and I tell her that I'm not sure if she meant to select the jingle bells. I repeat my question. During a long pause her breath is irregular and she rocks back and forth. She hits the jingle bells with her arm and her foot during this rocking but I don't respond as I am still unsure. She then stops, looks at and reaches for the maraca.*

In this clinical situation, staying with my uncertainty, clarifying my question, and allowing for more response time allowed Aileen to make a more accurate choice.

This sub-category of "uncertainties", which provided me with insight to what happens when I am unable to interpret the client's communicative behaviors, also allowed me to understand that in these situations I had to make an initial clinical response to continue with the process of interpretation. Furthermore, this category allowed me to begin to see the nature of my interpretations and responses as cyclical, which will be further discussed later.

It is apparent upon review of this category that I am making a wide variety of interpretations that cover the breadth of the client's experiences. Based upon simple tallies of

each subcategory of "Therapist Interpretation", I noted that the subcategories which occurred most frequently were A: The client's feelings/emotional states, and D: The Client's Preferences and Choices. While the tallies don't indicate importance, they do allow me to gather a sense of the extent to which I worked within each subcategory. In this case, based upon the frequency at which I made interpretations in each of these two subcategories, I seemed to be making interpretations to gain a better understanding of the client's emotional world, either directly by understanding their emotions, or indirectly by understanding their preferences. To gain this type of understanding, I must access my own emotional experiences empathically. Operating in this way, in which I am utilizing my own self, provides me with important tools for therapy. This is consistent with the humanistic approach to therapy (reference) in which the whole client is valued, and a subjective understanding of the behavior and interpretation are accepted. This type of interpretation has little correlation with specific behavioral understanding of the client's behaviors. Rather, because these emotional expressions occur in the subjective world of client and therapist, isolating behavior appears to de-contextualize the child's behavior in a way that is not meaningful or helpful clinically.

Category 2: Therapist's Responses (R)

After looking more closely at the types of interpretations I had made, I then considered the clinical responses that I made as a result of those interpretations. I grouped these responses into five initial subcategories and made tallies in a manner similar to the method described above. The initial sub-categories that emerged were 1) musical, 2) verbal, 3) musical/verbal, 4) affective, and 5) structural/procedural. Upon further consideration of the nature of these categories, it appeared that further differentiation between them was necessary. For example, certain "musical" examples appeared to also fit within the structural/procedural category because I was using music to structure an experience. Therefore, I re-organized the clinical response sub-categories to reflect musical and non-musical aspects of their usage, resulting in the six "Therapist's Response" sub-categories, described below and summarized in Table 4.

Table 4. Category 2: Therapist's Response

Subcategory	Examples	Tallies
F: Musical: Structural/Procedural	Slow the music (1) Play with a different strumming/picking pattern (1) Extend a song by improvising (1) Play with a different volume (2) Continue the song (9) Continue the tempo (1) Continue the activity (5) Musically reflect how she is moving (1) Play a favorite instrument (1) Play a favorite song (1) Play with a different volume (2)	39

	Change to a different song (3) Modify the song/musical activity (3) Play with a different tempo (1) Change activity (1) Start the music (1) Vocally reflect her vocalizations (4) Use vocal play (1)	
G: Musical: Affective	Vocally reflect my interpretation of how she is feeling (2) Try to change her affect with music (1)	3
H: Musical: Verbal Communication	Encourage her while singing (1) Vocally reflect my observations (4) Sing directions (1)	6
I: Non musical: Structural/Procedural	Allow for response time (2) Give her physical help (4) Make a choice for her (1) Give her an instrument (1) Move closer (1) Give her what she requested (1)	10
J: Non-Musical: Affective	Smile with her (1) Laugh with her (1) Reflect her facial expression (2) Make eye contact (2) Reflect her movements (2)	8
K: Non-musical: Verbal Communication	Ask for clarification (4) Praise her verbally (5) Ask a question differently (1) Ask a question verbally (1) Ask for confirmation (1) Re-state her choice (1) Reflect what I see (1) Explain what I am doing (2)	16

In describing and differentiating these categories, I observed that my clinical responses primarily occurred simultaneously, concurrently, or in quick succession. Further, these responses were cumulative; one response would determine the next one, and there seemed to be a continuous flow of experiences that build throughout the session. This cumulative nature seemed to be essential to the nature of my responses. Therefore, I will describe each subcategory using examples that show primarily my use of each type of response, but these examples will also demonstrate the use of multiple responses. Again, this supports the importance of context: because the responses don’t occur in isolation and they are affected by what happens previously, and they effect what happens after.

Musical: Structural/Procedural

This sub-category is defined by my use of music to structure musical interactions and experiences by making musical choices, and musical changes to facilitate the clients' participation and experience. This involved my use of songs or instrumental music to extend a song or transition to a new musical experience within the session. It also involved dynamic and tempo changes, decisions to change or modify songs, use a particular song, improvise, etc. For example, in a session with Aileen, she was appearing to be fatigued and I wanted to transition to a musical experience that would help her to re-focus:

> *Aileen is resting on the couch… I gradually increase my volume and use the chord progression for our hello song. She still doesn't move, which is unusual for the beginning of our sessions…I transition into our movement song and play with a faster tempo. I incorporate words about "waking up" and she whines but sits up.*

So, in this example, I use changes of tempo to move from initial music into the hello song, and I use volume and tempo changes to transition into a movement experience in an attempt to engage her more actively. This also exemplifies the use of multiple responses, as using music to structure the child's experience naturally leads into using music to verbally communicate, described in Subcategory H.

Musical: Affective

This sub-category is defined by my use of music to either reflect or modify the child's affect. This involved using components of singing, vocalization, and/or instrumental music for this purpose. For example, in a session with Aileen, she had tripped and fallen. Although she was not injured, she was crying in a manner that I interpreted to be angry. I wanted to first meet her angry emotions:

> *…I know that she gets upset when she falls down…she's still vocalizing "ahhh" and it sounds angry-I begin singing about getting angry when I fall down-I'm singing words that reflect how I interpret her to be feeling. I play in a minor chord progression to reflect her emotions, and she seems to "ahh" in time with my playing-it seems interconnected and she is continuing to vocalize in a similar way. She's not crying, just vocalizing angrily, so I continue in this way.*

After a few minutes, I felt that her angry vocalizations had tapered and I tried to modify my music to reflect other affective possibilities and transition to a new musical experience:

> *This has been going for a little while so I begin to sing a verse about how people will help her get up and I don't have to be angry anymore. I slowly modulate my playing to reflect this change in tone.*

This interaction resulted in Aileen calming and moving on in her session to participate in an instrumental experience.

Musical: Verbal Communication

This sub-category is defined by my use of aspects of instrumental music or singing to communicate directions, to reflect my observations, or to encourage the client using sung words. It involved my improvisation of lyrics or songs that captured what I wanted to communicate to the client. For example, in a session with Courtney, I was encouraging her to separate her hands independently and reach out to play the guitar. I sang:

Courtney, Courtney, play the guitar, oh play the guitar…

Because Courtney took some time to initially reach out to strum the guitar, I added a response by increasing the tempo and playing with a louder volume (examples of subcategory F: Musical: Structural/Procedural) while continuing to improvise lyrics about what I was asking Courtney to do. Courtney then reached out to strum several times.

Non-musical: Structural/Procedural

This sub-category was defined by the use of non-musical responses to structure the overall session in order to facilitate the client's experience. This involved my allowing for silent response time, providing physical assistance and prompting, providing song choices, providing instruments of choice, etc. For example, in a session with Bethany (also described in Subcategory A: The Client's Feelings), she was having difficulty reaching out to make a selection with her hands. Therefore, I offered two pieces of popular sheet music, both of which I knew that she could identify. I named each song and asked, "Which do you want?" After about 15 seconds, Bethany reached for one of the songs.

Non-musical: Affective

This sub-category is defined by the use of my affect and body language to reflect or affirm the client's actions or facial expressions. This involved my use of my facial expressions, eye contact, and non-verbal gestures. This is a response sub-category that seemed to be used simultaneously with all other types of responses, although I did not use it frequently as a primary response. For example, in a session with Courtney, we improvised at the piano:

> *Courtney reaches out to play with her [dominant] hand and she then turns her head and makes eye contact with me. She smiles and I reflect her smile as I continue to play. As we continue to improvise, she reaches out and plays with two hands on several occasions and continues to make eye contact. I musically reflect this and match the tempo she is playing. She pauses to clasp her hands together and I move with my body to reflect this tension that I observe. I also try to create tension in the music that would lead her to resume playing.*

While this example contains my use of various types of responses, it also illustrates how I use myself affectively in the session, both to match the client's affect, to encourage her, and to show my support.

Non-musical: Verbal Communication

This sub-category was defined by my use of non-sung words. It involved my using words to ask questions, restate questions, request clarification, praise and affirm, reflect observations and emotions, or explain a question or expectation. An example of my use of this response subcategory is in a session with Bethany:

> *Bethany looks tired and her head is down a little, although she lifts it up to look at me. I reach out to assist her in separating her hands so she can play the guitar. She is physically resisting my help and I say "Aww, you are fighting me on that, huh?" I stop my physical help, Bethany laughs and smiles, maintains eye contact and reaches independently to play the guitar.*

In my interpretation, Bethany's emotional response to my verbal comment indicated that she understood what I was saying. Her actions after my comment indicated that she wished to do this playing without my assistance.

Summary

Based on the overall tallies, I appeared to use music mainly to structure the session (39), using musical affective (3) and verbal communication responses (6) less frequently. Among the non-musical responses, the most frequent one that I used was verbal communication (16), and this reflects my assumption of the client's ability to understand my verbal communication. Overall, my uses of musical and non-musical responses were relatively similar, indicating that I frequently moved between the two. This frequent movement is consistent with the cumulative nature of the responses throughout the taped sessions and again indicates the importance of context in understanding how the client's responses are considered and used within the session.

Category 3: Therapist's Process

After having analyzed *what* I had interpreted and what my responses were, it became clearer to me that I had to address the *how* of the therapeutic process. To more fully understanding this part of the process, I began by considering relationships between my interpretations and responses. At this point I understood that within the clinical context, my interpretations and responses were cyclical: an interpretation led to a response, then to another client communicative behavior, another interpretation, another response, etc. My visualization of this cycle is shown in Figure 1. In this cycle, each communicative behavior leads me to make an interpretation. Based upon this, I then respond, and this clinical response leads the client to make another communication.

This cycle seemed incomplete, as it did not yet address how I go through the process of *making* an interpretation, which is at the core of the study. In order to understand more about this process, I then reviewed the original transcripts and considered why I made each interpretation, within each clinical situation. I initially established that I used behavioral observation, intuition, client-therapist relationship history, experience as a music therapist, RS knowledge, and general knowledge to inform my clinical interpretations and decisions. I tallied each of these to gain an overall sense of their use. These are summarized in Table 5.

Figure 1. Interpretation/Response Cycle

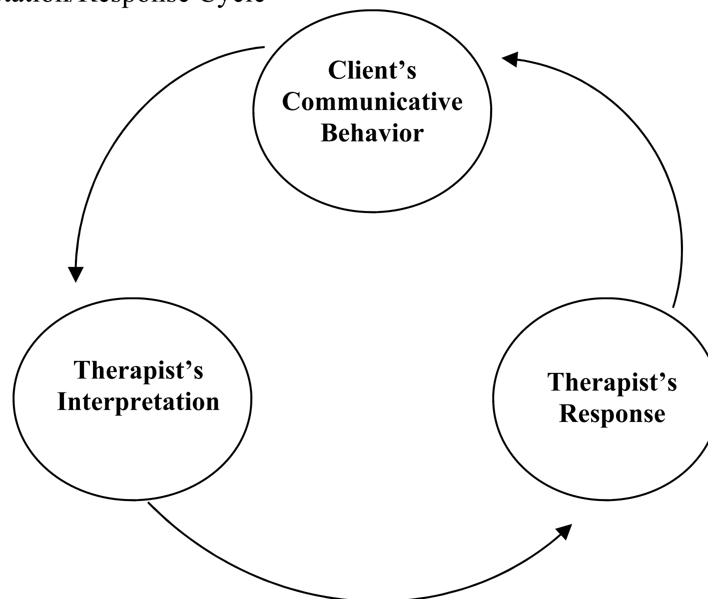


Table 5. Initial Process Sub-categories

Sub-category	Tally
Client/therapist relationship history	32
Behavioral Observation	31
Intuition: emotional, interpersonal, empathetic, common sense	22
RS knowledge	4
Other RS client history	3
Requests for clarification/ Educated inferences	2

After noting the higher frequency of my usage of my client/therapist relationship knowledge, behavioral observation and intuition, I looked more closely at these subcategories to

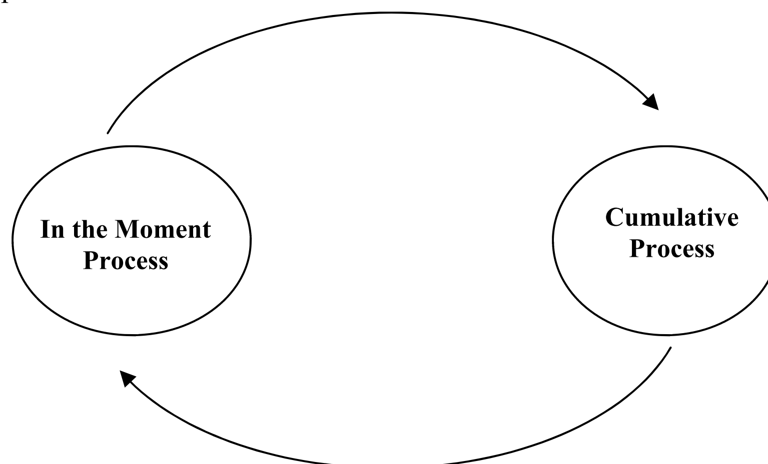
examine if any relationships were apparent. It occurred to me that of these initial sub-categories, some happened in the moment (for example, behavioral observation), while others were drawn upon my past experience (for example, client therapist relationship, and RS knowledge). Since some of these initial process sub-categories were rather general, it was helpful for me to describe them more specifically. I then re-worded these sub-categories within the context of present and past experiences, as summarized below in Table 6.

Table 6. Category 3: Therapist's Process

As I make interpretations in the moment during music therapy sessions with girls with RS, I use these in the moment/immediate processes: • I watch carefully the client's affect • I watch carefully the clients movements • I watch carefully the client's eye contact/gaze • I listen carefully to the client's words • I listen carefully to the client's vocalizations • I listen carefully to the client's music • I ask questions to clarify my understanding • I trust/accept non-traditional forms of communication • I use my feelings about what is happening in the moment • I use my intuition about what is happening in the moment
As I make interpretations during music therapy sessions with girls with RS, the following cumulative processes constantly inform my in the moment/immediate interpretations: • I consider my overall clinical experience with RS clients • I consider my overall clinical experience with non-RS clients • I consider my personal experience with other people • I use my knowledge of my relationship with THIS client • I use my knowledge of my experiences with THIS client

As I considered the relationship between my "in the moment" processes and cumulative processes, again, a cyclical relationship was apparent to me. A visual representation of this process is presented in Figure 2.

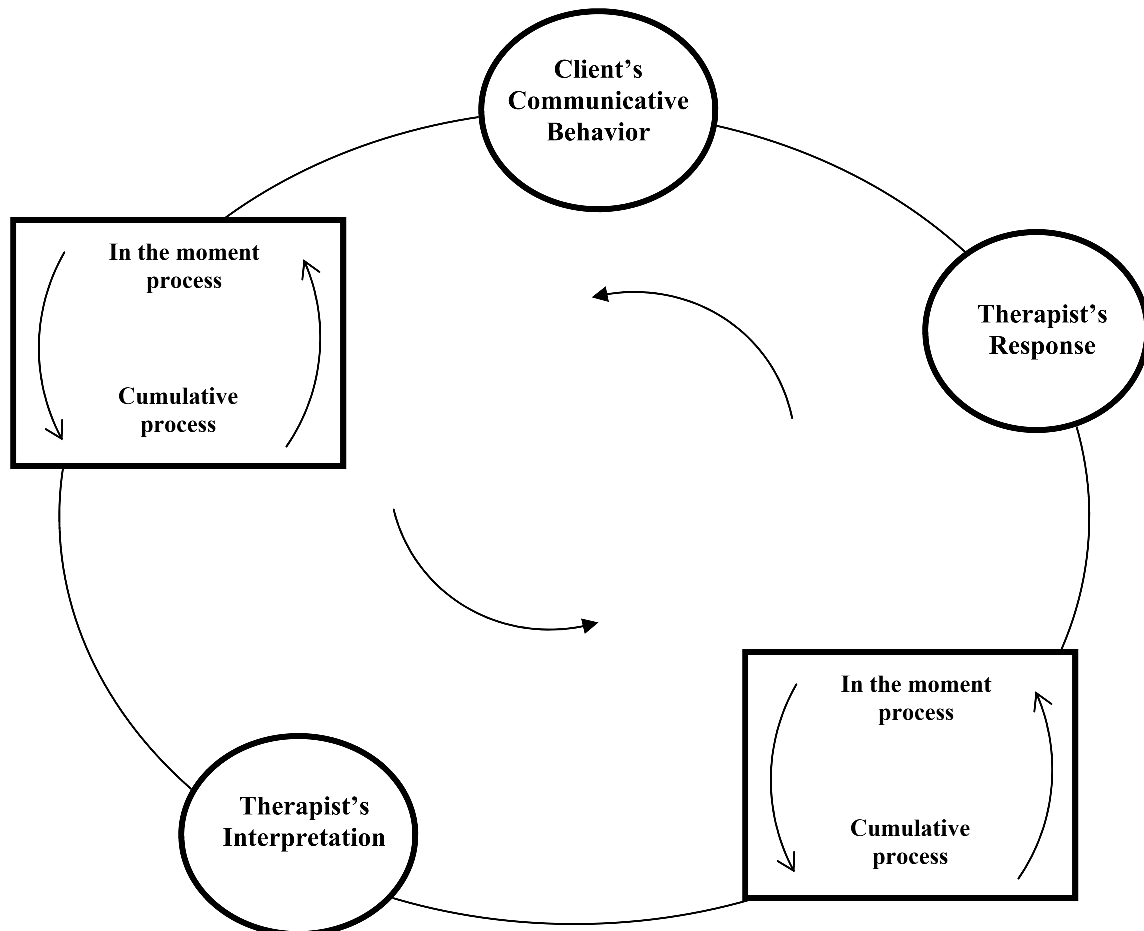
Figure 2. Therapist's Process



In this figure, my “in the moment” process adds to my cumulative experience. In a similar way, my cumulative experience provides me with my personal context, which I use while I am “in the moment” with the client. Therefore, in addressing my first research question, I interpret the communicative behaviors of individuals with RS by first assuming the client’s intentionality, and second by using a cyclical process in which I make interpretations, guided by using my *in the moment* and *cumulative* experiences.

Further, in considering my second research question, (How do I use these interpretations to guide my clinical decision making?) and given the cyclical nature of my interpretations and responses, I concluded that I also use this process to guide my clinical responses. The full process is presented in Figure 3.

Figure 3. Therapist’s Interpretation/Response Process



This cycle therefore shows my movement from the client’s communicative behavior to the cycle of “in the moment” and “cumulative” processing in order to make an interpretation. I then used

the same process to select a response and the cycle begins again as the client continues to communicate. At the foundation of this cycle are my assumptions about the client's communicative intent and my acknowledgement of the importance of the clinical context.

Assumption of Client's Intent and Importance of Clinical Context

Gestalt: Insights and Applications

Despite the diverse nature of my interpretations and responses, a common cyclical movement seems to be underlying both my process of making interpretations and responses. My "in the moment" processes are constantly adding to my bank of "cumulative" knowledge, and at the same time this cumulative knowledge is constantly informing my "in the moment" processes. Therefore, when I am working with clients with RS, I am using my "in the moment" experience and accessing past experiences in this cyclical manner to interpret their communicative behaviors. These interpretations then inform my clinical decisions and responses in a similar cyclical manner.

This representation of my process is interrelated and specific to each clinical situation. Unlike the linear concept of "Antecedent-Behavior-Consequence" seen in behavioral theory (Kassin, 1998), wherein a behavior is looked at in relative isolation, my cyclical processes of interpretation and responses are non-linear and constantly accumulating. I use these cycles to move into my understanding of the client's physical and emotional world, and/or into my own experience to access a response. My interpretive process seems to occur both consciously and unconsciously and at various rates as each music therapy session unfolds. At times, I quickly move with the client from response to response without great conscious thought, at other times I wait for the client to communicate before considering which clinical direction would be the best.

The resulting interpretation/response process bears some similarities to two additional studies in the literature. In a study about the experience and use of intuition by music therapists, Brescia (2005) found that intuition provided knowledge and guided interventions in a way that was be helpful to music therapists. Further, Brescia stated that intuition can be developed through both experience and self-awareness. The use of intuition was an important aspect of my process of making interpretations and responding to my clients.

Furthermore, these results have some similarities to Bruscia's study (1995) in which he described four "levels of experiencing": his client's world, his personal world, and therapist's world while working with a client in the Bonny Method of Guided Imagery in Music (BMGIM). These levels are sensory, affective, reflective, and intuitive. In the present study, my sensory, affective, reflective and intuitive experiences all contributed to create my in the moment and cumulative process.

Personal Outcomes

As a music therapy clinician, I have benefited from this research process by gaining a greater understanding of the processes that I use to interpret and respond to the communicative

behaviors of my clients with RS. I have clarified my knowledge about the breadth and variety of the types of interpretations and responses I use. I have broadened my understanding of the process that drives these interpretations and responses, as well as the deep relationship these responses have with the clinical situation itself. Despite the diversity of clinical experiences, I seem to be using this process in a similar manner that constantly determines the direction of my session. My awareness of this inner process allows me to consider how I nurture and maintain my openness and ability to be "in the moment" with the client. It also allows me to build cumulative knowledge and understanding of my clients.

CONCLUSION

Koppenhaver and his colleagues (2001) asserted that communicative intent should be assumed, and the present results take this assertion one step further in order to explore how to work with this assumption in music therapy. Elefant's (2001b, 2005) conclusions showed that clients with RS can communicate with intent, and it is extremely important to consider this in music therapy. In the present study, it was apparent that while the clients' intentions to communicate were assumed, not every communicative behavior that each client displayed was interpreted as having communicative value. Sometimes, a gesture or a sound was simply a gesture or a sound. At other times a gesture or sound was interpreted in a way that altered the direction of the session. This implies that individuals with RS, like individuals who communicate using spoken language, communicate in ways that involve multiple layers and complexity. Some communications may be specifically directed towards others, some may serve as general commentary, while other sounds and gestures may not have specific meaning. In negotiating this as music therapists, it is this researcher's view that it is necessary for clinicians and caretakers to find ways of recognizing the intent, and interpreting communicative behaviors in a way that is trustworthy. This trustworthiness, then moves towards the importance of building of a trusting relationship and meeting of emotional needs of clients with RS. It is through this relationship that the work of therapy can then be accomplished (Elefant, 2001a; Elefant & Lotan, 2004; Wigram, 2002).

These results may be helpful to teachers, clinicians and parents who are interested in increasing their own understanding of how they communicate with people with RS. They would also be applicable for student music therapists who are learning to communicate with individuals who have RS or with clients who have limited "traditional" communication abilities.

This study also highlights the importance of self-awareness as an essential component of the interpretative process. Because interpretation is often an inner, subjective experience, unique to each individual, there are few external ways to monitor and observe these processes. Increasing one's self-awareness then allows one to understand their processes and become more mindful and conscious in their interpretations. Therefore, my experience of using self-inquiry has provided me with a deeper insight that has facilitated my self-awareness as a therapist, and it is my hope that it will positively benefit the therapeutic process and most importantly, the clients with whom I work. The diversity of the clinical interactions that I have encountered in this research has also reminded me of the abilities and depth of personality of each of these girls, and this also pushes me to continue to grow in my understanding of who they are as children.

The cyclical process that I discovered has no end. This reminds me that the processes I use to interpret and respond does not reach an end, and I will always need to strive to add to my understanding of the ways these clients are communicating to me. This research process has, therefore, reinforced the importance of being open to each client as our communications unfold. Outside of the moments of clarity that can occur in each session, there are many times my understanding of what the client is communicating is incomplete or even unknown. The heart of process is the intention to get as close as possible.

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