PERCUSSION IN MUSIC THERAPY: AN INSTRUCTIONAL MANUAL BASED ON ANALYSIS OF THE RELATED LITERATURE

A THESIS

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COLLEGE OF ARTS AND SCIENCES

BY
BILL MATNEY, B.S., MT-BC

DENTON, TEXAS

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TEXAS WOMAN'S UNIVERSITY DENTON, TEXAS

Date

To the Dean of the Graduate School:		
I am submitting herewith a thesis written by I Percussion in Music Therapy: An Instructional Manual Literature. I have examined this thesis for form and accepted in partial fulfillment of the requirements for major in Music Therapy.	ual Related to Analystontent and recomme	end that it be or of Arts with a
We have read this thesis and recommend its acceptant	nce:	
Jany a Hadell Jan H. Charrel		
James Chenevert, Ph.D., Department Chair		
Richard Rodean, Ph.D., Dean of the College of Per	forming Arts	
	Accepted:	

Dean of the Graduate School

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ABSTRACT

BILL B. MATNEY

THE USE OF PERCUSSION IN MUSIC THERAPY: AN INSTRUCTIONAL MANUAL BASED ON ANALYSIS OF RELATED LITERATURE AUGUST 2004

The purpose of this study was twofold. First, the researcher conducted a content analysis of literature in music therapy and related fields, including those works that discussed the use of percussion in music therapy. Through this analysis, the researcher attempted to answer the questions "Why is percussion used in music therapy," and "How is percussion used in music therapy." Second, the researcher created an instructional manual that describes the history, performance techniques, therapeutic functions, and therapeutic techniques of percussion instruments common to music therapy practice. The manual was based on 1) the findings of the content analysis, 2) the experiences of the researcher as a music therapist, 3) the experiences of the researcher as a percussionist, and 4) the experiences of the researcher as a percussion and music therapy teacher.

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CHAPTER I

INTRODUCTION

The promotion of percussion for health and wellness has become a growing phenomenon in the past decade. Corporations and business consultants are utilizing drum circles to enhance productivity, to reduce burnout rates, to release tension, and to engage in social interaction. The use of percussion in music therapy practice has become commonplace with most every client population. Some percussion companies have even developed health and wellness divisions for new instrument development, as well as percussion and wellness programs.

Practicing music therapists utilizing percussion instruments are aware of the salutary role they may perform. As the result of a developing body of research literature, the field has gained insight into how percussion may play important therapeutic functions and what techniques and theories may facilitate that role. Up to this juncture, the results of this research literature have not been formally and collectively discussed.

While percussion usage becomes more widespread in the field of health, percussion pedagogy in relation to such usage appears to be lagging behind. University curricula generally focus less on percussion applications than on guitar, piano, or autoharp competencies. Percussion classes offered at universities are often geared towards music education, and are therefore relegated to classical percussion technique, such as

snare drum rudiments and timpani tuning. Instruction manuals and books discussing percussion and health focus either on a specific technique or client population, are non-scholarly in nature, or are outside the realm of music therapy practice. Many workshops that promote health through percussion do not come from a music therapy perspective, although they offer valuable information, and some exceptions exist. There currently exists the need for a balance of practical knowledge of percussion and music therapy based on 1) historical and ethnographic knowledge of percussion, 2) practical performance techniques for a variety of percussion instruments, 3) therapeutic functions of percussion, and 4) therapeutic applications of percussion.

In the same fashion that music history and theory are deemed important, historical and ethnographic knowledge of percussion and its functions may be valuable to the music therapist. The applicability of percussion in music therapy may very well be linked to history and culture at large. Some instrumental techniques are indigenous to the histories and cultures that created the instruments. Awareness of these histories and cultures may enhance the music therapist's knowledge of percussion, perhaps making it more relevant to their work.

Music therapists may also benefit from percussion performance technique. While percussion instruments may be accessible to the novice musician, they are also as difficult to master as any other instrument. Each percussion instrument has its own technical nuances. At the same time, general guidelines and techniques exist that carry

over to each instrument. The field currently lacks a pragmatic and comprehensive approach to percussion performance technique in relation to music therapy practice.

Therapeutic functions and techniques are at the heart of music therapy practice. A knowledgeable music therapist uses a variety of instruments and corresponding techniques to achieve certain therapeutic goals. Percussion can serve many functions in music therapy, but the literature has not discussed a general approach to the application of percussion in music therapy practice.

This thesis investigates the relation of percussion to music therapy, and the findings are organized into five sections. The first section contains a review of the literature touching on percussion and its functions, both general and those specific to music therapy. The second section presents the methods used to conduct a content analysis of music therapy and health-related literature. The content analysis is constructed in a way that it will ascertain the therapeutic functions of percussion and techniques used to enhance those functions. The third section discusses the results of the content analysis. The fourth section offers conclusions based on the results of the content analysis. The last section, or appendix, offers an instructional manual on percussion and music therapy, based on the content analysis and the experiences of the researcher. The instructional manual is intended for individual reference or for teaching university undergraduate students how to play and use percussion instruments in music therapy practice.

CHAPTER II

TATAKU

The word *tataku* originated in Japan. Loosely translated, *tataku* means "to strike," "to hit," "to beat on a drum," "to clap," or "to beat out a rhythm." If there is an intention or teleology to percussion, then what is it? Why do we drum? What meaning does percussion offer us? Does biology play a role, and if so, how? Does a specific cultural value system play a role, and if so, how? How do the functions found in cultures-at-large compare with the functions witnessed in our field? Each of these questions deserves consideration. If we seek to understand the functions and techniques of percussion as they relate to music therapy practice, we must invariably begin with some awareness of the roles percussion music plays in the larger context of human experience.

This review discusses the functions of percussion and their evolution over time, as well as the roles that cultures have played in our current understanding of those functions. The literature review is separated into four sections. The first section discusses the origins of percussion as related to physiology and history. The second section presents the importance of rhythm in music and percussion. The third section discusses the role of percussion in different cultures. The last section presents the use of percussion in promoting health, eventually progressing towards the functions of percussion in music therapy.

Percussion Defined

Webster's Dictionary notes the word "percussion" as derived from the Latin word percussus, meaning "to strike" (1988). Percussion denotes a category of musical instruments that most likely require striking, shaking, or scraping in order to produce sound. Percussion instruments are primarily sub-classified as: (a) membranophones, which produce sound through vibration of a membrane or skin, such as a drum; (b) idiophones, which produce sound through the vibration of their entire bodies, such as a cymbal or triangle; and (c) chordophones, which produce sound through the vibration of strings, such as a hammer dulcimer. Some musicologists would also include certain aerophones and electronic techniques as percussion instrumentation, but what specifically qualifies these instruments as percussion and what separates other aerophones and electronic instruments from being included as percussion, is not clear (Schietroma, 1991).

The word *percussion* may also connote the actual playing of the instrumentation mentioned above. Akin to the word "drum" being used to describe an instrument or the act of playing the instrument, percussion can also imply the act of playing its instrumentation.

Percussion Physiology, History, and Evolution of Instrumentation

Percussion exists as a communicative and expressive behavior both within and outside of humanity. A variety of mammals partake in striking parts of their bodies against each other, against the ground, or against objects to communicate messages with each other (Randall, 2001). For these non-human animals, drumming may communicate

territorial ownership, superiority, submission, and willingness to mate. The communications appear to be interspecial in some cases. It is theorized that these behaviors likely evolved through time, and research demonstrates that more evolved animals "drum" more complex rhythmic patterns. Within humanity, percussion and drumming certainly include expressive and communicative functions, but are not necessarily limited to such. Where non-human animal drumming would generally be considered non-musical, the human uses of percussion have also advanced to include musical and extra-musical functions.

Percussion is regarded as the oldest musical instrumentation besides the human voice. Historical documentation and excavation note the frame drum to have existed over 6,000 years ago (Redmond, 1996). Rattles and scrapers existed during the Paleolithic age (Peters, 1975). The precise origins of these ancient instruments can often only be theorized. However, their history, evolution, and cultural significance can offer us insights into the musical and extra-musical roles they have served throughout time.

Percussion is also considered the largest classification of musical instrumentation. Available material resources play a role in the diversity of percussion instruments, which have been created out of wood, metal, animal parts, shells, gourds, and more recently, synthetic materials. Log drums, membrane drums, gongs, chimes, bells, shakers, rattles, and marimbas of differing materials, shapes, sizes, timbre, and pitch, as well as their accompanying sticks, mallets, beaters, strikers and scrapers, can be found all over the

world. These instruments continue to evolve, for their numbers and types are only as limited as the human imagination.

Percussion and Rhythm

Rhythm exists in all objects. Everything vibrates at some rhythmic frequency.

Even inanimate objects vibrate at the subatomic level. We are surrounded by rhythms of gravity, electromagnetic fields, light waves, and sound (Luce, 1971). We constantly witness and experience rhythm in our own lives. Our walking patterns, sleeping patterns, heart rates, neural processes, and body motions all occur in rhythms. These rhythms are not necessarily constant, but rather change in order to adapt to circumstances (Rider, 1997). Generally speaking, rhythm is change perceived through the senses as an ordered, recurring, temporal structure (Mish, 1988). Rhythm and motion are inextricably linked. Perceived rhythm is most likely to be heard, seen, or felt.

In terms of human physiology, John Blacking theorizes that the rapid evolution of mankind is directly related to an awareness and manipulation of rhythms (1973).

Blacking notes that the cognitive awareness of rhythms may responsible for: (a) the creation and evolution of tools; (b) the understanding and manipulation of natural cycles; and (c) the understanding of the human body, medicine, and health.

Rhythm is also a fundamental element of music, perhaps the most fundamental of all the elements. While harmony and melody, at least in Western theoretical terms, can be absent from a musical piece, the organizational pattern of sound in time cannot be absent, no matter how inconsistent that rhythmic structure may be. For this reason, rhythm holds a key importance when creating music.

The exploration of rhythm in music therapy occurs both with and without the use of percussion. Clair, Bernstein, and Johnson (1995) explored the rhythm playing characteristics of people diagnosed with dementia. These authors noted that rhythm provided significantly more successful imitation and participation over time, and that specific drums were more effective than others in producing this success. Thaut conducted extensive research on the use of rhythmic auditory stimulation, rhythmic facilitation, and rhythmic cuing to improve the gait of persons who have Parkinson's disease (1996) or have experienced strokes (1997). Cohen used rhythm to assist in speech production, both with and without the use of percussion (Cohen, 1993; Cohen,1995; Cohen,1998).

Regardless of the specifics or motives of its usage, rhythm is an undeniable aspect of any music therapy encounter. Music cannot exist without rhythm. Rhythm appears to be demonstrated most convincingly through percussion (Gaston, 1968).

Percussion and Culture

Music is a cultural universal. Percussion is also a cultural universal. However, the functions of percussion, and the instrumentation and music used in those functions, may vary from culture to culture. Throughout history, societies have used percussion for religious and secular ceremonies, to signify battle, to structure work and play, for social

functions, for healing, as an art form, for communication, for teaching history, and for cultural and community identification.

One use of percussion has been for religious and secular rituals, as witnessed in Yoruban culture. *Bata* drums are used in Yoruban Santeria religious ceremonies to call out spirits so that they may bless a recipient (Bergeron, 1998). Specific rhythms, each one representing an individual deity, are played on the *Bata*.

Percussion is also found to play a vital role in secular community ritual, as noted in the *Gahu* drumming of the Ewe culture from Ghana, Africa. The word *Gahu*, derived from the words *ga*-meaning "iron" and *hu*-meaning "vehicle," is noted as translating into "airplane." This relatively new music/dance form celebrates travel to other countries and promotes tourism (Locke, 1998).

In many non-western cultures, such as the Muslim and Hindi cultures of northern India, percussion emulates and acts as spoken language through the use of rhythm, pitch, and articulation. The *tabla* is an instrument that imitates Arabic and Hindi languages through a plethora of inflections and has a tradition in reciting "poetry," family lineage, and history through those inflections (Mistri, 1999). Percussion has also been used as a means of long distance communication with other communities. Large *krin* drums, log drums originating in the forest region of Guinea, were often used to communicate with distant tribes concerning important news (Boukhezer-Diabate, 2004).

Percussion music has been used to structure work and play. The Tsonga people of Mozambique have created a discrete body of work songs that rely on drums and singing.

Specific songs and rhythms are played for specific tasks (Johnson, 1973). Likewise, the djembe/dunun drumming of the Maninka people have produced Kassa rhythms, which are played while farmers walk from field to field sowing and harvesting crops. Drummers strap the instruments to their bodies so that they can accompany the workers (Clark, 1999). The Maninka people use these same drums with a different rhythm, Demosoni Kelen, to create a teasing drummer/dancer interaction. The purposes of this rhythm are pure play and fun (Clark, 1999). The samba marches of Brazil during Carnaval, a festival and parade celebrating the days before Lent, also exemplify the use of percussion to accentuate play and frolic (Smith, 2003).

Percussion both identifies culture-specific music and crosses over cultural boundaries. Throughout history, civilizations have borrowed instrumental ideas from each other, contributing to the evolution of percussion instruments and to the music produced by those instruments. The *djembe* (jem-be) drum exemplifies such a crossover. According to one story of origin, the word *djembe* actually implies a "coming together," as noted by the words *Dien*, meaning "unity" and *Bin*, meaning "harmony" (Diallo, 2003). While the specific location of its inception is somewhat debatable, the eventual spread of the djembe throughout the Mali Empire, and eventually throughout West Africa and the world, is certain. Although some regions of Africa maintain physical and sonic characteristics to their djembe drums, dances, and rhythms, other structural and musical ideas continue to evolve cross-culturally to this day.

Culture and Aesthetics

The artistic qualities of percussion in some cultures take on a meaning and experience different to the Western understanding of aesthetics in music. Where Western music performance may be seen as separated from the audience, much non-western music performance does not create such a separation. This psychological distance stems from the differing evolutions of bias concerning the functions of art.

The bias of formal and objective "art" in both classical and popular music are common in the West. In many cases, the formal musical product tends to supercede the process that creates it, as well as the overall psychological experiences in which the music may play a role. Classical music training depends on formal analysis. Musicians teach and learn in terms of written musical form, analysis of written music, and deconstruction of its content. Those who do not excel are often discouraged to engage in musical pursuits. Classical music performance is generally relegated to those who excel in the ability to understand music as a written form. Musical improvisation written into a musical score is indeed a rarity.

Although the approach is different, the emphasis on strict form is also applied to Western popular music. Live performance is less prevalent in Western society than in other cultures. Music is more likely to be recorded, mass produced, and sold.

Performances are more likely to attempt to match the recorded format, rather than elaborate on or deviate from it. Musical improvisation within traditional Western forms is more likely the exception than the rule.

This common perception of Western music, art music especially, tends to create distance between performer-as-formal-contributor and audience-as-receiver of music. We may observe this psychological distance manifesting itself physically, as through the use of an elevated stage. Minimal interaction between performer and audience takes place. For many non-musicians, music is a passive experience to enjoy comfortably.

Where much of Western music may be seen as formal, objective, and audiencepassive, some non-Western music may be seen more as essential, experiential, kinesthetic, cathartic, and audience-active. Specific African drumming rhythms that can be found in different regions may be somewhat different in form, but they maintain a rhythmic and melodic essence. Furthermore, the use of improvisation within the rhythm also maintains its essential nature. The consideration of an absolute form is impossible concerning such rhythm songs. Much African music includes active and experiential participation by all members of the community. Participation may take the form of playing instruments, singing, or dancing (Chernoff, 1979), and the improvisation promotes active listening and participation. This communal phenomenon can be witnessed in the Bantuic languages of Africa, where the word Egwu can be translated as 'rhythm', 'dancing', 'a dance', 'singing', 'song', 'drumming', 'drum', and even as 'sport' (Mereni, 1996a). The translation of 'sport' is significant, as it brings up the African perception of music and the potential parallel kinesis, or 'force motion.' Not only does music require movement to exist, but music is also considered an integral part of the forward motion and change of life in Africa. The use of music is often tantamount in the

exchange of ideas and social structures, in the telling of history, and in the healing of the sick. Music is considered a healer of divine origin that is capable of changing anyone it touches (Chernoff, 1979).

Native Americans, such as the Ojibway (Burton, 1909), also experience music as an active communal necessity, one that pervades the spiritual, social, communicative, and labor-related aspects of life. Music is an important part of the harvest, of religious ceremony, of birth, and of death. Music and art are not an escape from these experiences, but rather an intrinsic part of them.

There are likely many underlying social and cultural implications contributing to differing aesthetic perceptions of music. The Western bias towards absolute art forms offers a different viewpoint from the essential, flexible, and improvisational nature of non-Western cultures. The pursuit of individuality and the notion of intellectual property also offer an alternate perspective from the communal and open nature of many cultures. What appears important is our striving to recognize the potential strengths and weaknesses that the differing aesthetic views offer us as music therapists.

Percussion and Non-Western Healing Traditions

Percussion and music have been considered healing and wellness tools in many non-Western cultures. In fact, some cultures consider musicians *shamen*; people who act as traditional healers and priests within a community. In some African cultures, healing rituals may be perceived differently than in Western cultures, because illness is perceived differently. In Africa, individual illness may be considered a communal occurrence, and

mental or physical illnesses are considered a result of imbalance that the community can address.

Functions of Percussion in Western Culture

In Western society, percussion instruments have generally been experienced in the same sense that all musical instruments have, through performance to achieve aesthetic value. Music is often considered art for art's sake, and percussion instruments play a rhythmic and textural role, adding to the artistic merit of the performance.

Percussion is often used to emphasize motivation and forward motion in western music. However, western music is more ensconced in melody and harmony, and these musical attributes have by and large been deemed more important than that of rhythm or texture. For example, in 1950, most music dictionaries recognized fewer than twenty percussion instruments (Peters, 1975). Therefore, it is reasonable to conclude that percussion has been considered generally less valuable to the development of western art music, with more recent compositions beginning to change that perception.

Sound Healing Practice

Sound healing practice occurs outside of the profession of music therapy. The Western sound-healing movement, which may be considered a facet of the music and wellness continuum, generally differs from music therapy in its approach (Crowe, 1996). Where music therapists tend to focus on clinical service, as well as clients' perceptions and holistic experiences, "sound-healing" practitioners tend to focus on biophysical resonance, the sound vibration, and its effect on the body as an energy system. In music

therapy practice, sound quality and musical quality are often utilized, but the majority of methods do not separate the music or the sound stimulus from the human's perception of them. Both music therapists and sound healing practitioners may cross over their respective theoretical orientations, and both groups occasionally collaborate on certain areas of sound, music, and wellness.

One component of the sound healing movement utilizes group rhythmic drumming and non-Western healing practice as a tool for wellness. Some proponents of rhythm and sound healing approach their systems in reference to non-Western traditions of drumming, shamanism, and trance. Williams and Myer (1992) discuss the use of shamanic drumming within the men's movement. This movement involves groups of men meeting to explore and advance personal development. Shamanic practice and percussion have become common vehicles for this exploration.

The drum circle movement, which began in the 1970's, appears to have been based initially on non-Western drumming practice, including the use of communal indigenous rhythms and some sound healing theory. Drum circles evolved and gave rise to drum circle facilitation and the rhythm-wellness movement, which include such facilitators as Arthur Hull, Paulo Mattioli, Kalani, and Christine Stevens. The primary mission of the rhythm-wellness movement is to create community rhythm/drumming based events that promote sharing through musical activity. The current drum circle movement includes music therapists, health practitioners, sound-healing practitioners, and rhythm-wellness practitioners. Rhythm and wellness contributors, such as Mickey

Hart and Reinhart Flatischler, as well as those mentioned previously, support the field of music therapy by publishing books on drumming and wellness, by backing music-and-wellness-related legislation, and by offering drum/rhythm facilitation workshops. This content analysis will not focus on findings outside of music therapy and related scholarly literature, but the researcher wishes to acknowledge the important contributions of these practitioners.

Percussion in Music Therapy

The use of percussion in music therapy is documented, although it is rarely the primary focus of the publication. Slotoroff (1994) employed improvisational drumming techniques for assertiveness and anger management in the psychiatric setting. Burt (1995) discussed the use of percussion with Vietnam veterans as part of treatment for post-traumatic stress disorder. Through improvisation on hand drums, the veterans were encouraged to express their emotions appropriately and to build a sense of connectedness. The approach combined improvisational drumming and cognitive-behavioral therapy to address power issues and boundary issues, both experientially and symbolically. Moreno (1989) explored the use of Paiste-Sound Creation gongs in music therapy. He presented the potential of these gongs to evoke imagery, to express a range of emotions, and to develop residual hearing in clients who are deaf. In what appears to be a series of research articles concerning the use of percussion and rhythm as therapy in the geriatric setting, Clair and Bernstein (1990) explored vibrotactile and non-vibrotactile instrumental playing responses with people who were in the latter stages of Alzheimer's disease. The

researchers noted a higher level of response and interaction when the drums were on the clients' laps. Stevens (2003) discusses drum circle facilitation from the perspective of a music therapist. Stevens explains why drum circles can be therapeutic, and how to facilitate a drum circle effectively.

Percussion and Music Therapy Pedagogy/Practice

While areas of percussion, such as the use of Orff instrumentation and the adaptation of hand bell ensembles, have been developed in the field of music therapy, no overall pedagogical approach exists that demonstrates how to apply percussion and rhythm to music therapy practice. Percussion appears to be essential to music therapy practice, but limited references exist in the literature concerning percussion pedagogy within music therapy curricula. Decuir mentions a shift to functional, improvisational, and transpositional skills for the music therapy student, but he makes no reference to percussion (1989). Likewise, Bruscia notes no specifics concerning percussion in music therapy curricula, but does mention the importance of acquainting students with music from other cultures (1989). Wright (1992) states percussion competencies should be demonstrated in the last two musical levels of her proposed pre-internship requirements, but does not suggest what those demonstrations should entail. In a time when percussion and rhythm continue to be growing areas of interest in the field, only scant references in the literature exist that discuss how percussion may be taught within music therapy curricula.

Percussion and Music Therapy Competencies

The American Music Therapy Association's *Professional Competencies* (2003) define the following percussion skills as necessary for the professional music therapist:

(a) to play percussion instruments alone or in an ensemble; (b) to demonstrate basic knowledge of non symphonic and ethnic instruments; and (c) to demonstrate basic skills on several standard percussion instruments sufficient to facilitate rhythm based experiences for groups and individuals.

Music Therapy Instruction Manuals

Manuals addressing music instruction methods in music therapy curricula are becoming more common. Robert Krout currently has two published manuals, as well as multiple published articles, which instruct music therapists (as well as performers and educators) how they may enhance their guitar skills. Each instructional manual focuses on a different style of guitar playing, including acoustic technique (Krout, 2001) and rock technique (Krout, 1995). These two manuals address guitar skills from a music therapy perspective. Krout (1983) also published an instructional manual that addresses how to teach adaptive guitar lessons to special learners.

Pinson's (1999) instructional manual *Playing Piano Without Notes* (1999) demonstrates a way to approach functional piano without musical notation. Pinson uses the circle of fifths as the theoretical basis for the exercises in the book. He gradually adds harmonic and melodic considerations that are to be practiced by rote, through the circle of fifths, in order to develop the musical ear and create independence from the written

note. This approach applies to the more improvisational and transpositional demands of the music therapist. While these manuals are certainly not limited to use by music therapists, their approach is based on the needs and perspectives of music therapy work; therefore, they are reasonable choices for inclusion in music therapy curricula. These manuals may also be used with some clients, although none of them appear to demonstrate specific adaptive uses of the instruments.

The literature regarding percussion instruction in music therapy curricula usually applies to specific areas of clinical practice or specific client populations, and that literature is minimal. Krout (1997) offered supplementary percussion with guitar instruction to enhance musical offerings to clinicians. Reuer and Crowe (1995) developed an instructional manual geared towards well, older adults. The manual discusses how to facilitate rhythm-based events geared towards older adults, and includes specific rhythm activities. Stevens (2003) wrote an accessible drum circle facilitation book that discusses functions, set-up, and approaches to drum circle facilitation, as well as some basic drum technique and considerations for specific client populations.

Music Therapy and Content Analysis

Music therapy researchers use many standard methods of inquiry. One method commonly used in research is content analysis, which is defined as the systematic and objective identification of message characteristics in order to categorize the messages and infer the who, where, how, why, or what about those messages (Rainbow, 1987). A content analysis, which is a form of descriptive inquiry, allows the researcher to

understand one or more of these questions by analyzing all the literature in the specific area or areas. The researcher can then reach substantiated conclusions about the literature as a whole.

Content analysis has been a useful mode of inquiry within the field of music therapy. Jellison (1996) conducted a content analysis exploring the use of music in special education. Wolfe, O'Connell, and Epps (1986) performed a content analysis of therapists' verbalizations during group music therapy. Standley (1986) conducted a meta-analysis on music research in medical and dental treatment. Gfeller (1987) offered a content analysis of music therapy theory and practice as demonstrated in music therapy literature. Gregory (2002) performed a content analysis of the various behavioral research designs found in the *Journal of Music Therapy*.

Explanation of Current Study and Purpose Statement

This study includes a review and content analysis of the literature pertaining to the use of percussion in music therapy, and seeks to ascertain the usefulness of percussion in music therapy practice.

The purpose of this study was twofold: (a) to examine the use of percussion in music therapy; and (b) to use the information to assist in the creation an instructional manual. The researcher conducted a content analysis of music therapy and related medical/ psychological literature. The content analysis was guided by the following research questions.

Q1: Why is percussion used in music therapy (therapeutic functions)?

Q2: How is percussion used in music therapy (therapeutic techniques)?

CHAPTER III

METHOD

The research for this project exists as two separate but linked entities: (a) a content analysis of literature concerning the applications of percussion in music therapy; and (b) an instructional manual for teaching percussion in music therapy curricula.

Criteria for inclusion in the content analysis were as follows: (a) music therapy journals, theses, dissertations, books, and peer-reviewed medical/health journals, written in the English language, between the years 1980 and 2004; (b) literature that is scholarly in nature; (c) research that investigates elements specific to the use of percussion in music therapy; and (d) research that investigates therapeutic uses of percussion. Because Orff instrumentation and hand bell methods have been developed in music education and adaptive music education more so than other areas of percussion, the researcher did not include them in the content analysis.

The results derived from the content analysis assisted in the creation of an instructional manual. A manual is a handbook used to assist in understanding how to perform a task (Mish, 1988). This instructional manual is suitable for teaching a class on the use of percussion in music therapy and is based on the content analysis, as well as the researcher's experiences as a teacher, music therapist, and percussionist. The manual includes the following: (a) a preface which relates to the content analysis;

(b) introductions to applied rhythmic concepts related to music therapy practice; (c) introductions to instruments commonly used in music therapy practice, including a brief history and general technique; and (d) how these instruments and concepts may be adapted and applied to music therapy practice. The manual was based on the following considerations: (a) the findings of the content analysis: (b) the author's personal experiences teaching percussion to music therapy undergraduate students; (c) the author's experiences as a percussionist; and (d) the author's experiences as a music therapist.

Literature Search, Review, and Analysis

Literature searches included the American Music Therapy Association CD-Rom, hand searches of the more recent Journal of Music Therapy and Music Therapy

Perspectives, and on-line searches utilizing the following databases: American

Psychological Association (PsychInfo), Cumulative Nursing (CINAHL), EBSCOHost,

ECO, First Search, ProQuest, WorldCat, and Dissertation Abstracts Online. Individual

Keywords used for the Music Therapy CD-Rom search can be found in Table 1 below.

The keywords used for the online database search included the use of the word 'therapy' with each of the keywords found in Table 1.

Table 1

Database Search Keywords

Results of Content Analysis

The comprehensive search for published articles from 1980 to 2004, using criteria outlined in this paper, identified a total of 106 publications that contained 142 entries concerning percussion functions and techniques in music therapy. A brief analysis of the number of publications mentioning percussion use by five-year increments (see Figure 1) and the prevalence of instruments used (see Table 3) was conducted in order to provide general information for the instruction manual. A more thorough analysis of the therapeutic functions of percussion (see Figure 2) and the therapeutic techniques involved while using percussion (see Figure 3) were conducted in order to answer the primary research questions, those being:

Q1: Why is percussion used in music therapy?

Q2: How is percussion used in music therapy?

Data Analysis

During review of the literature, the researcher organized demographic information, including the year, the source type, the client population, and the instrumentation. Concerning the two research questions, the researcher noted salient thematic words or phrases and codified them into relative categories (see Table 2). The researcher attempted to include the author's language verbatim in the functions and techniques columns, while categorizing them according to common themes.

In the case of source types, abbreviations were used. The following key is offered to clarify source types: J=Journal, B=Book, BC=Book Chapter, D=Dissertation, and T=Thesis.

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1980	Moreno	J	Non-Clinical	timpani, snare drum	expression, awareness of issues	improvisations of 6-8 people, using music to reinforce and enhance dramatic enactments
1981	Rider	J	Non-Clinical	hand drums, mallets, tambourines	assessment tool for cognitive functioning	M-PACD protocol
1981	Alvin	J	Developmental Delay	hand cymbals, drums, xylophone	non-verbal self- expression, self- confidence	musical regression into infant behavior.
1982	Carle	J	Geriatric	tone blocks, bells, tambourines, shakers, castanets	social interaction, group awareness, self- confidence, assertion, expression	guided improvisations with processing about daily events
1982	Gross	J	Chronic Illness	tambourine, rhythm instruments	mood	group improvisation

Key For Sources: J=Journal, B=Book, BC=Book Chapter, D=Dissertation, and T=Thesis

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1983	Gibbons	J	Emotional Disturbance	conga	to assess if rhythmic response may be useful in evaluation	rhythmic imitation
1983	Stephens	J	Psychiatric	drums, rhythm instruments	self-awareness, group awareness, communication, expression	improvisation
1984	Dougherty	J	Alcoholism	maracas, tambourines, rhythm sticks	expression, social	play instruments during structured sing-alongs
1984	Marley	J	Medical	maracas, sandblocks, xylophone, drums, tambourine	relaxation, decreased crying, decrease in throwing objects, decreased lethargy	mirroring rhythms by both client and therapist, movement to rhythmic songs
1984	McDonnell	J	Medical	castanets, tambourine, drum, cymbals	family interaction, expression	improvisation, accompaniment to sing- alongs

 $\label{eq:continuous} \textit{Key For Sources: J=Journal, B=Book, BC=Book Chapter, D=Dissertation, and T=Thesis}$

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1984	Rovics	J	Non-Clinical: Musicians	drums	self-awareness, group interaction	group drumming improvisation to tales
1984	Steele	J	Learning Disability	drum set	gross-motor skills	performing simple drum set patterns
1984	Sutton	J	Not Specified	drum set	physiological measurement of coordination and motion	Music Therapy Physiological Measures Test
1984	Thaut	J	Autism	snare drum, cymbal, clave, maraca	sensory integration, coordination, motor sequencing, laterality	instrumental exploration, playing instruments at tempos other than client's rhythmic rocking
1985	Cofrancesco	J	Rehabilitation	tom-tom drum	motor: hand grasp strength	playing drum with sticks
1985	Wheeler	J	Substance Abuse	rhythm instruments	expression, social	rhythm activities

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Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1986	Cohen, J.	J	Psychiatric	recorded tape, drum	measurement of rhythm to ascertain possibility as an evaluation tool	various rhythm tests
1986	Jones	J	Mental Retardation	hand drums, tambourine, mallets,	assessment tool for cognitive development	use of M-PACD assessment protocol
1986	Shively	J	Dementia	maracas, drum, xylophone, boomwhackers	emotional, expression	playing instrument in a way that represents how you feel
1987	Krout	J	Special Education	bells, tambourine, shakers, maracas, claves, woodblock	motor: hand-eye coordination, gross and fine motor skills	accompanied rhythm play

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1987	Priestley	J	Not Specified	drums, rhythm instruments	self-awareness, communication, expression	Jungian theory: concerning the shadow side: improvisation and processing
1987	Sanger	J	Physical Disability	gamelan style gongs and metallophones	communication / social	adapted gamelan performance
1988	Celli	D	Not Specified	drums	self-awareness	drumming discussion, drumming with role- playing: Jungian Analysis
1988	Gunsberg	J	Developmental Delay + Non- Clinical	bongo, tambourine	social integration	Improvisations to create phases of Improvised Musical Play protocol: reciprocal interaction between all students

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1988	Hadsell	J	Rett's Syndrome	tambourines, hand drums, castanets	promotion of appropriate hand usage, eye contact, social interaction, communication, understanding of cause-effect	use of instruments to assist in eventual reduction of hand stereopathies
1989	Barrickman	J	Medical	small rhythm instruments	movement/ coordination	matching tempo, echo responses
1989	Haines	J	Emotional Disturbance	drums, rhythm instruments	self-esteem, expression, social	client leading group improvisations, drumming to word or phrase rhythms
1989	Langdon	J	Psychiatric	maracas, tambourine	self-awareness, expression, group interaction	improvisations, fil- in-the- blank verbal phrases

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1989	Moreno	J	Not Specified	Paiste Sound Creation Gongs	emotional expression	improvisation, free association, and imagery
1989	Moreno	J	Deafness	Paiste Sound Creation Gongs	development of residual hearing	aural discrimination between gongs
1989	Moreno	J	Blindness	Paiste Sound Creation Gongs	spatial orientation	aural tracking
1989	Moreno	J	Not Specified	Paiste Sound Creation Gongs	counting	playing while counting
1991	Bartram	BC	Not Specified	drums	rapport	imitation (led by client)
1991	Bruscia	В	Not Specified	drum, cymbal	diagnosis of rhythmic response	Nordhoff-Robbins Creative Music Therapy, short rhythmic phrases for imitation

 $\begin{tabular}{ll} Key For Sources: J=Journal, B=Book, BC=Book Chapter, D=Dissertation, and T=Thesis \\ \end{tabular}$

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1991	Bruscia	В	Not Specified	tambourine, maracas, cymbals, drums, chime bars	self-awareness, social interaction	Free Improvisation: Client chooses instruments for self and therapist
1991	Bruscia	В	Not Specified	tom-tom, cymbal, gong, tambourines, drums. Rhythm instruments	Goals created individually through process: may include social, emotional, self- control	Analytical Music Therapy: Improvisation and Freudian-type analysis
1991	Bruscia	В	Not Specified	drums, maracas, tambourines, temple-blocks	motor, auditory perception, risk- taking, commitment to group, cognitive	Experimental Improvisation Therapy: Choice of instruments, music and dance improvisation.

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1991	Bruscia	В	Not Specified	cymbals, bells, tambourines, maracas, drums, castanets	communication,self- awareness, self- expression, emotional release	Paraverbal Therapy: Improvisations with rhythmic dialogues. Client rhythm becomes motive to improvise on. Metaphoric use of instruments.
1991	Bruscia	В	Not Specified	drums, maracas, claves, tambourines, kalimbas, tambourine, various	self awareness, communication, social, self- expression, emotional release, stress management	Adult Improvisational Therapy: Gestalt type awareness of the moment
1991	Bruscia	В	Not Specified	drums, triangle, xylophones, rhythm sticks	expression, emotional release, self- awareness	Musical Psychodrama: Verbal enactments of situations supported by improvised music

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1991	Bruscia	В	Not Specified	drum, cymbal, rhythm instrument	interpersonal relatedness	Developmental Therapeutic Process: Improvisation that graduates to play therapy practice
1991	Bruscia	В	Not Specified	triangle, cymbals, woodblocks, jingles, rattles, tambourines, tympani, bass drum	self-awareness, social	Orff Improvisational Therapy: Rhythm instruments accompanying Orff instrumentation
1991	Bruscia	В	Not Specified	bongo, rhythm instruments, rhythm sticks	communication, social, educational	Music in Developmental Therapy: structured improvisations

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1991	Burke	BC	Grieving	drums, xylophone, rhythm instruments	rapport	improvisation
1991	Clair	BC	Dementia	rhythm instruments	cognitive, social	imitation of rhythmic patterns
1991	Clarkson	BC	Autism	drum, resonator bells	rapport, social, attention to task	Creative Music Therapy improvisation
1991	Gunsberg	J	Developmental Delay + Non Clinical	drum, tambourine	social integration	Improvisations to create phases of Improvised Musical Play protocol: reciprocal interaction between all students
1991	Henderson	ВС	Sexual Abuse	drum, xylophone	expression, spiritual communication, emotional	supported improvisation, client centered

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1991	Kaser	J	Pedophilia	drum set	body awareness and coordination, social, self awareness, reality testing	drum set instruction and processing of performance experience
1991	LeCourt	ВС	Autism	rhythm instruments	rapport	improvisation (Virginia Satir)
1991	Loveszy	ВС	Medical	drum	expression	improvised songwriting with drum
1991	Murphy	BC	Psychiatric	slit drum	expression, coping skills	group and one on one improvisation
1991	Nolan	ВС	Psychiatric	snare drum (brushes), xylophone, maracas	social	group improvisation
1991a	Robbins	ВС	Mental Retardation	drum, cymbal	self-expression, self- confidence	Creative Music Therapy improvisation

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1991b	Robbins	BC	Rehabilitation	drum	communication, structure	creative music therapy improvisation,
1991	Salas	BC	Blindness, DD	rhythm instruments	rapport	improvisation
1991	Scheiby	BC	Wellness	shaker, wind chimes, marimba, tibetan bowl, metal rattle	communication, self- acceptance, resolution	psychodynamic improvisation
1991	Standley	J	Medical: Infants	rattles, bells	attention	play to gain eye contact
1991	Van Den Hurk	вС	Psychiatric	various	tolerance of change, social, self confidence	improvisation
1991	Wigram	ВС	Blindness, Behavioral Disturbance	drums, cymbal	hand control, attention	improvisation

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Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1991	Zoller	J	Speech disorder	clapping, stamping, walking, beating, drums, rhythm instruments	articulation of words and phrases	playing rhythm of word/phrase while speaking/ chanting
1992	Bednarz	J	Psychiatric	rhythm instruments	peer interaction, awareness of others	playing along with guitar songs (instrumental accessibility)
1992	Hibben	J	Behavior Issues	slit drum, hand drum, claves, maraca,	communication, awareness of family dynamics, expression	Family therapy centered: group improvisation
1992	Jacobowitz	J	Medical: Pediatric	drums	social interaction, emotional expression	improvisation with family members

 $\begin{tabular}{ll} Key For Sources: J=Journal, B=Book, BC=Book Chapter, D=Dissertation, and T=Thesis \\ \end{tabular}$

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1992	Murphy	J	Medical: Acute Care	Gato drum	emotional expression, self-awareness	improvisation
1993	Cohen, N.	J	Speech disorder	hand drum, tapping	communication: speech production	structured rhythmic instruction, speech/chanting
1993	Longhofer	J	Psychiatric	African (Dagbamba) drums	self awareness, social, vocational awareness	study, practice and performance of indigenous rhythms
1993	Streeter	В	Various	tambourine, bongo, tambour	language, social, attention, physical development	musical play, improvisation, imitation
1994	Aldridge	J	Dementia	drum, cymbal	cognitive functioning, intentionality, social, speech, motor, quality	improvisation

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1994	Brotons	J	Dementia	drums, claves, jingle bells, sand blocks, spoons, tambourines	meaningful activity	playing to preferred music recordings
1994	Cassity	J	Psychiatric	drum, claves, rhythm instruments	communication, expression, group awareness	one-on-one and group improvisation
1994	Edgerton	J	Autism	snare drum, cymbal	communication	improvisation
1994	Miller	J	Family Therapy	conga, shakers, afuche-cabasa, tabla, bongos.	social, self-awareness in context	family therapy approach: structured improvisations

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1994	Pavlicevic	J	Psychiatric	bongo, marimba, xylophone, bass drum, side drum cymbal	communication	graduated improvisation based on musical improvisation rating scale
1994	Ritholz	J	Developmental Delay, Abuse	drum	expression, self- awareness	use of drum while client told puppet story
1994	Slotoroff	J	Psychiatric	tom-tom drums hit with sticks	social, expression, emotional	improvisation applied with cognitive behavioral therapy
1994	Warja	J	Psychiatric	wood blocks	expression, self- awareness	Jungian approach to metaphoric improvisation, processing
1995	Burt	J	Psychiatric	hand drums	expression, stress reduction, community	facilitated group drumming, processing

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1995a	Clair	J	Dementia	floor tom, bass drum, paddle drum, frame drum	meaningful activity, participation	structured rhythm activities
199 5 b	Clair	J	Dementia	drum	meaningful activity, participation	imitation of rhythmic patterns
1995	Cohen, N.	J	Speech disorder	hand drum	communication: speech production	rhythmic patterns in melodic intonation therapy
1995	Dun	J	Medical	drum	expression, interaction, confidence, motivation to leave room	improvisational

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1995	Gauger	T	Psychiatric	Accompaniment drum, keyboard, recorded music	emotional, social, motor	breathing, rhythmic movement, creative movement to music
1995	Lipe	J	Dementia	drums	verbal response	improvisation, rhythmic imitation, verbal response, chanting and drumming
1995	Loewy	J	Speech	rattles, tambourines, drums	communication, social	rhythmic grounding, soloing, organized rhythms with name, and then words.
1995	Mattingly	J	Various	drums	communication, social,	group drumming
1995	Perilli	J	Psychiatric	drum	self-awareness, self- confidence, rapport	improvisation

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1995	Reuer	М	Non-Clinical	drums / rhythm instruments	wellness, leisure skills, volunteerism	training via instructional manual
1995	Reuer	M	Non-Clinical	egg shakers	internalizing rhythm, movement	egg shaking activity
1995	Reuer	М	Non-Clinical	assorted	social, expression	improvisation related to name and three words about yourself
1995	Reuer	M	Non-Clinical	assorted rhythm instruments (no drums)	communication	facilitated rhythm activity
1995	Reuer	M	Non-Clinical	egg shakers	social, movement	passing eggs in rhythm
1995	Reuer	М	Non-Clinical	rhythm sticks, paddle drums	motor coordination	singing echoed rhythm/playing echoed rhythm
1995	Reuer	М	Non-Clinical	paddle/frame drums	attention to task, self- expression	individual improvisations over group ostinato
1995	Reuer	М	Non-Clinical	paddle drums	social, body awareness	playing your drum and drums on either side of you

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

1996 Amir J Not Specified bongos, maracas, wind-chimes, drums, musical processing via the Holis musical processing Model 1996 Austin J Psychiatric marimba, gato drum social interaction reflecting back to client rhythm / melody: Junging theory 1996 Clair B Geriatric drum emotional expression improvisation 1996 Clair B Geriatric rhythm diversion from instruments inactivity, discomfort, daily routine 1996 Clair B Geriatric drum with mallet emotional: decreased matched drumming cliented agitation (therapist matching cliented)							
maracas, wind- chimes, drums, Tibetan bells 1996 Austin J Psychiatric marimba, gato drum emotional expression 1996 Clair B Geriatric rhythm diversion from instruments inactivity, discomfort, daily routine 1996 Clair B Geriatric drum with mallet emotional: decreased agitation greflecting back to clier rhythm / melody: Junging theory 1996 Clair B Geriatric rhythm diversion from instruments inactivity, discomfort, daily routine 1996 Clair B Geriatric drum with mallet emotional: decreased agitation drumming to favorite music, processing	Year	Author	Source	Population	Instruments	-	Techniques Implemented
drum rhythm / melody: Jungist theory 1996 Clair B Geriatric drum emotional expression improvisation 1996 Clair B Geriatric rhythm diversion from maintaining pulse of a instruments inactivity, discomfort, daily routine 1996 Clair B Geriatric drum with mallet emotional: decreased matched drumming agitation (therapist matching clients) 1996 Clair B Geriatric drum with mallet emotional expression drumming to favorite music, processing	1996	Amir	J	Not Specified	maracas, wind- chimes, drums,	self-awareness,	processing via the Holistic
1996 Clair B Geriatric drum with mallet emotional expression drumming to favorite music, processing	1996	Austin	J	Psychiatric		social interaction	reflecting back to client rhythm / melody: Jungiar theory
instruments inactivity, discomfort, daily routine Clair B Geriatric drum with mallet emotional: decreased agitation (therapist matching clients) Clair B Geriatric drum with mallet emotional expression drumming to favorite music, processing	1996	Clair	В	Geriatric	drum	emotional expressioin	improvisation
agitation (therapist matching clients) 1996 Clair B Geriatric drum with mallet emotional expression drumming to favorite music, processing	1996	Clair	В	Geriatric	•	inactivity, discomfort,	maintaining pulse of a rhythmic beat
music, processing	1996	Clair	В	Geriatric	drum with mallet		matched drumming (therapist matching client
1996 Clair B Geriatric drum social group drumming	1996	Clair	В	Geriatric	drum with mallet	emotional expression	drumming to favorite music, processing
	1996	Clair	В	Geriatric	drum	social	group drumming

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1996	Hanson	J	Dementia	rhythm instruments, drums, clapping, tapping	meaningful activity, attention	lower demand rhythm activities
1996	Robb	J	Psychiatric	Not Specified	social	rhythmic grounding (pulse) to facilitate improvisation
1996	Rugenstein	J	Depression	drums, rainstick, rattles, xylophone	Emotional/ Spiritual (based on Spectrum of Consciousness)	improvisation reflecting imagery and drawings
1996	Seidl	D	Speech: Selective Mutism	drum	communication: verbal and non-verbal / rapport	drumming to polka music

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1996	Wylie	J	Rett Syndrome	clapping, tapping knees, castanet, cowbell, hand drum, tambourine,	hand use	instrumental playing to songs, encouraged independent playing and prompted playing
				jingle bells, egg shakers, sandblocks, screaming hammer		
1997	Clair	J	Dementia	paddle drums	family interaction, engagement	playing rhythms
1997	Korb	J	Dementia	Not Specified	affective response, focus, meaningful activity, reduction in caregiver stress	rhythm ensemble
1997	Maurer	J	Non-Clinical	drum with timpani mallet	relaxation, introspection	breathing, closing eyes, listening to repetitive drumming for 15 minutes

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1998	Edwards	J	Medical	castanet animal	expression	client accompanies the improvised song with instrument
1998	Harris	J	Juvenile Offenders	drums	educational motivation, community, reconnection to heritage, relaxation, expression	group drumming
1998	Lenhoff	J	Williams Syndrome	drums, drum set	discussion of musical potential	use of drums and drum set
1998	Montello	J	Emotional Disturbance, Learning Disability, Behavioral Disturbance	Not Specified	expression, attention, motivation, reduction of hostility	reading simple rhythmic values, improvisation, story telling, solo improvisation

 $\begin{tabular}{ll} Key For Sources: J=Journal, B=Book, BC=Book Chapter, D=Dissertation, and T=Thesis \\ \end{tabular}$

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
1998	Suzuki	J	Geriatric,	rhythm	mood and congruent	playing along to music
			Depression	instruments,	memory	
			•	paddle drums	•	
1999	Mikenas	J	Addiction	drums	emotional expression:	group drumming
					social	c
2000	Friedman	В	Dementia	drum, mallet	meaningful activity,	imitating simple rhythms
					social, cognitive	
2000	Friedman	В	Speech	drum	syllable articulation	playing phrase rhythms,
					•	then speaking them
2000	Friedman	В	Substance	drums	expression, social	group drumming,
			abuse		awareness,	improvisation
					communication	•
2000	Friedman	В	At-Risk	drums	social, expression, self	group drumming
			Adolescents		awareness	
2000	Friedman	В	Corporate	drums, rhythm	social interaction,	facilitated drum circles:
			Wellness	instruments	teamwork	metaphor for team based
						work
2000	Friedman	В	Prisoners	drums	social, expression,	group drumming
*					emotional	

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

-						
Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
2000	Friedman	В	Grieving	drums	emotional expression, community awareness	facilitated drum circles, drumming with rap music
2000	Friedman	В	Autism	conga drum, hand drum	social interaction, emotional expression	improvisation
2000	Friedman	В	Down Syndrome	ashiko	self-confidence, social interaction	drumming duet performance
2000	Friedman	В	Williams Syndrome	gathering drum	motor, attention	playing gathering drum that has bouncing objects on it
2000	Kaplan	D	Non-Clinical	drums	mood, group cohesiveness, enhanced awareness	group drumming
2000	Matthews	J	Dementia	rhythm instruments	engagement, participation	rhythm activities
2000	Wyatt	T	Well	drums	self-esteem, social	group drumming

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
2001	Bittman	J	Non-Clinical	egg shakers, drums	stress reduction	group drumming protocol, use of drumming with imagery
2001	Koebel	D	Non-Clinical	drums	stress reduction, socialization, neuroendocrine increase	facilitated group drumming
2002	Berger	BC	Autism	maracas, claves	movement/ coordination	playing instruments
2002	Berger	BC	Autism	cabasa	sensory-input	"brushing"
2002	Berger	BC	Autism	drums	movement/ coordination	playing instruments
2002	Berger	BC	Autism	drums	attention, sensory integration	playing repeated rhythms together
2002	Unkefer	В	Psychiatric	pitched and non- pitched percussion	social, communication, emotional expression	group improvisation

Table 2

A Content Analysis of Literature Concerning the Use of Percussion in Music Therapy.

Year	Author	Source	Population	Instruments	Therapeutic Function/ Purpose of Study	Techniques Implemented
2002	Watson	J	Sexual Offenders	drums	intimacy, social skills, pro-social behavior, awareness and expression of emotions	group drumming, improvisational drumming
2003	Bittman	J	Non-Clinical	egg shakers, drums	stress reduction, career fulfillment	facilitated group drumming, processing
2003	Kenny	T	Addiction	drums	social (cohesion), emotional (stress reduction)	group drumming using simple African rhythm songs
2003	Stevens	В	Various	hand drums, drums, rhythm instruments, etc.	stress reduction, self expression, community connection	facilitated drum circles, group drumming, "heart beat" (rhythmic grounding)
2003	Winkelman	J	Addiction	drums	relaxation, stress reduction	group drumming, 'shamanic' drumming

CHAPTER IV

RESULTS

Demographics

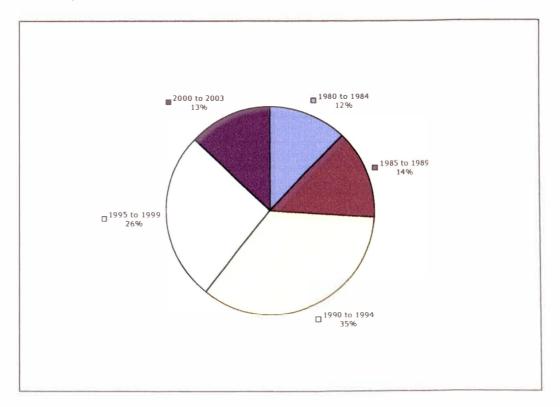
Demographic information presented itself through the content analysis. This information is not specifically related to the research questions, but rather represents trends in the literature that are worth mentioning.

Frequency of Percussion Use Per Five-Year Increments

The use of percussion instruments, as noted in the literature, has been relatively consistent over time (see Figure 1). However, the reviewed literature mentioned percussion usage the most during the 1990-1994 period and the least during the 1980-1984 period.

Figure 1

Percentage of Articles by Five-Year Increments



Prevalence of Instruments Used

A total of 45 different percussion instrument categories were mentioned in the literature (see Table 3). The texts make copious mention of non-specified "drums," as well as hand drums, non-specified "rhythm instruments", and tambourines.

Miscellaneous instruments were those mentioned only once in the literature, and included the following: gamelan, boomwhackers, chime-bars, kalimba, rainstick, screaming hammer, gathering drum, Tibetan bowl, talking and brekete drums, spoons, tabla, and floor tom.

Table 3

Instruments and Number of Times Mentioned in Literature

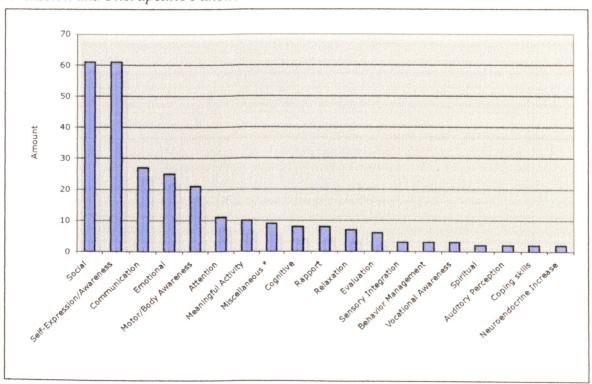
Instrument	Number of times mentioned		
Hand Drums	63		
Rhythm Instruments (type not specified)	26		
Drums (type not specified)	23		
Tambourine	22		
Cymbal	14		
Bells	10		
Maraca	8		
Xylophone	8		
Bongo	6		
Claves	6		
Paddle Drum	6		
Castanets	6		
Maracas	6		
Tone/Wood Blocks	5		
Gong	5		
Egg Shakers	5		
Jingles/Rattles	5		
Body Percussion	4		
Slit/Gato Drum	4		
Drum Set	4		
Tom-Tom	4		
Shaker	4		
Snare Drum	4		
Rhythm Stick	3		
Bass Drum	3		
Marimba	3		
Sand Blocks	3		
Cabasa	2		
Timpani	2		
Triangle	2		
Rhythm Sticks	2		
Wind Chimes	2 2 2		
Not Specified	2		

Functions of Percussion in Music Therapy

Seventeen categories of "therapeutic function / purpose of study" were derived from the analysis, as shown in Figure 2. It should be noted that many interventions focused on more than one goal, so that combinations of items, such as "emotion" and "expression," were common. An overview of each function is mentioned below.

Figure 2

Percussion and Therapeutic Function



Social Awareness and Social Interaction

Among the therapeutic functions mentioned in the literature, social functions, along with self-expression and self-awareness, were cited the most. The literature discussed the use of percussion to promote social interaction 61 times. Social interaction included (a) physical interaction through shared instrumentation, (b) group awareness and relatedness through the use of group musical activity, and (c) group awareness and relatedness through verbal processing of activity. Social dynamics, such as leading and following, were explored musically to enhance group awareness. The literature mentioned social concepts, such as group awareness, group commitment, interpersonal relatedness, teamwork, intimacy, pro-social behavior, cohesion, community connection, and family interaction.

Self-Expression and Self-Awareness

Like social awareness and social interaction, percussion was cited to promote self-expression and self-awareness 61 times. Emotions were expressed through percussion either naturally through improvised play or as a result of the therapist's requesting clients to play in a way that represented their feelings. Self-awareness was explored through the ideas of self-confidence, assertion, self-esteem, an understanding of self in relation to issues or context, introspection, risk taking, and the intentionality of consciousness through musical play.

Communication and Emotion

Communication and emotion functions were also mentioned frequently.

Communication was cited 27 times in the literature. Communication often included the rhythmic chanting of words and phrases in relation to rhythmic performance on the instrument. This overall idea was applied not only in the area of speech production and articulation assistance, but also in relation to speech as a social communication tool.

Emotional functions were mentioned 25 times. Emotional functions included decreased agitation, change in mood and congruent memory, diversion from discomfort, decreased lethargy, decreased crying, and reduction in hostility.

Motor/Body Awareness, Attentiveness, and Meaningful Activity

Three areas which received notable mention in the literature included motor / body awareness, attentiveness, and meaningful activity. Motor and body awareness functions were mentioned 21 times. Hand grasp strength, hand-eye coordination, gross and fine motor skills, general body awareness, hand control, general movement to rhythm, and coordination were all explored physically through percussion. Attention functions were mentioned 11 times in the literature. Attention functions included eye contact, attention to task, and focus on objects. Meaningful activity as therapeutic function was found 10 times in the literature. Meaningful activity was discussed primarily in relation to the geriatric population. Development of leisure skills, an area related to meaningful activity, was also mentioned.

Relaxation, Cognition, Rapport, and Assessment

Percussion and relaxation were mentioned nine times in the literature. The small scope of relaxation functions included the term "stress reduction." Relaxation was aligned with susceptibility to hypnotism in one study (Maurer, 1997) and was paired with reduced employee burnout in another (Bittman, 2003).

Cognition was discussed nine times in the literature. In some cases, cognition was linked to assessment. Cognitive functions found in the literature included an understanding of cause and effect, spatial orientation, counting, or a general educational or cognitive emphasis.

The use of percussion for rapport building was cited eight times in the literature.

Percussion often functioned as an accessible means through which therapists and clients could begin to build a relationship. In order to facilitate rapport, many types of percussion instruments were used with clients.

Assessment was mentioned six times in the literature. Percussion was employed in rhythm subtests to help assess clients' physical, emotional, and cognitive functioning. Tests using percussion and rhythm included the Music Perception Assessment of Cognitive Development, the Music Therapy Physiological Measures Test, and the Nordoff-Robbins Music Improvisation Rating Scale.

Other Functions with Multiple Mentions

A total of 14 functions were mentioned three times or fewer in the literature. The areas of behavior management, vocational awareness, sensory integration, spirituality,

auditory perception, coping skills, and immunity increase each received minimal coverage. Behavior management was discussed three times in the literature. Articles mentioned the use of percussion to encourage a decrease in throwing objects or an increase in self-control. Pro-social behavior was the focus of another article. Vocational awareness was mentioned three times in the literature; it was related to music instruction and performance in a structured setting, as well as to career fulfillment and corporate wellness through group drumming and teamwork metaphors.

Sensory integration was cited three times in the literature, notably in Thaut's (1984) article on autism and Berger's (2002) book on sensory integration. According to the two authors, appropriate use of specific percussion instruments offered both tactile/kinesthetic and auditory input that could promote integration.

Spirituality was mentioned three times in the literature. Spiritual concepts that were specifically mentioned included Wilbur's *The Spectrum of Consciousness* (as cited in Rugenstein,1996), client spirituality as related to cultural practices (Henderson, 1991), and group drumming based on shamanic ideas of spirituality (Winkelman, 2003). Auditory perception, specifically the use of gongs for both aural tracking/spatial orientation and development of residual hearing through aural discrimination, was mentioned twice (Moreno, 1989). Coping skills were also discussed twice in the literature. Terms related to coping included "stress management" and "general coping skills." Two articles discussed the use of a group drumming protocol to boost immune cells (Bittman, 2001; Bittman 2003).

Miscellaneous functions included any function mentioned only once in the literature. Miscellaneous therapeutic functions included: (a) motivation to leave room, (b) volunteerism, (c) internalizing rhythm (d) affective response, (e) reconnection to heritage, (f) educational motivation, and (g) musical potential.

Summary of Functions

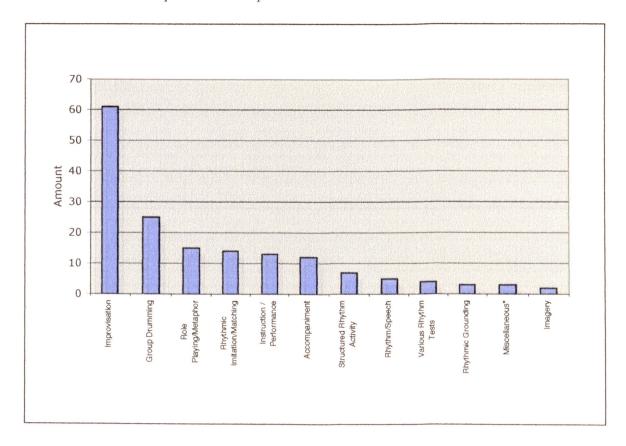
A broad range of therapeutic functions was mentioned in the literature. Of the 17 functions mentioned, the two found to be the most common were social and self - awareness / self-expression. Functions that were also cited multiple times included communication, emotional understanding, motor/body awareness, attention, and meaningful activity. The remaining ten functions were mentioned fewer than 10 times. The reviewed literature demonstrated that many therapeutic aims have been addressed through the use of percussion.

Therapeutic Techniques Using Percussion

A total of 16 general therapeutic techniques were described in the literature (see Figure 3). Again, it must be noted that many interventions employed multiple techniques simultaneously. These categories are not mutually exclusive. A synopsis of each technique is discussed below.

Figure 3

Percussion and Therapeutic Techniques



Improvisation

Improvisation, mentioned 61 times, was by far the most common technique used with percussion in the literature. Generally speaking, improvisation involves making music as you go. Improvisations occurred both in individual and group settings and were led by either the therapist or the client(s). In some cases, improvisations worked in conjunction with songwriting or the verbal processing of an event. In others, improvisations were used to enhance a dramatic enactment or story, to create metaphor, or to facilitate imagery. Occasionally the improvisations were structured by a specific

approach, such as Creative Music Therapy or the Improvised Musical Play protocol. In some cases, improvisational techniques were utilized as a part of a psychological framework, as described in Slotoroff's (1994) cognitive-behavioral approach. Almost every description of improvisation had its own distinguishing characteristic, and each experience addressed various goals and objectives.

Group Drumming

Group drumming was mentioned 25 times in the literature. Group drumming was often paired with verbal processing, metaphor, and improvisation. Occasionally, indigenous rhythms were used to structure the drumming sessions. Protocols were rarely mentioned, although two articles utilized the Remo *Health Rhythms* protocol (Bittman, 2001; Bittman, 2003), and one developed a specific protocol to assist in measurement (Kenny, 2003).

Role Playing/Metaphor and Rhythmic Imitation/Matching

Role playing/metaphor was mentioned 15 times in the literature. These techniques were almost always aligned with either group drumming or improvisation. Role playing techniques consisted of dramatic enactments, stories, and regression into infant behavior. Metaphorical techniques included playing instruments in a way that represented clients' emotional affect, instrument choices discussed as metaphor, Jungian archetypal metaphors, Freudian metaphors, metaphors based on Wilbur's *Spectrum of Consciousness* (1977), free association, teamwork metaphors, and shamanic metaphors.

Rhythm imitation and matching techniques were mentioned 15 times in the literature. Rhythm imitation was also described as "mirroring" and "echoing." Both the therapists and clients took the role of the imitator, depending on the therapeutic function.

Instruction / Performance, Accompaniment, and Structured Rhythm Activities

Music instruction and performance as therapeutic techniques were mentioned 13

times in the literature. These techniques manifested themselves as: (a) instruction and
performance on drum set; (b) group performance of an indigenous music, such as
gamelan percussion or Dagbama style drumming, (c) training and performance via an
instructional manual, or (d) general use of rhythm instruments to assist with motor
performance.

Accompaniment techniques were specifically mentioned 12 times in the literature. Either therapists or clients accompanied others on percussion instruments, depending on the context and function of the experience. Accompaniments either assisted improvisations or complemented structured songs.

Structured rhythm activities were mentioned seven times in the literature. The activities were usually structured in terms of instrumentation and rhythmic activity. These activities differentiated themselves from indigenous percussion techniques in that they were not based on a cultural construct, but rather were structured to facilitate specific functions.

Speech, Rhythm Tests, Rhythmic Grounding, Sound Production and Imagery
Rhythm / speech techniques were mentioned five times in the literature.

Depending upon the therapeutic function, speech may have facilitated playing the instrument rhythmically, or playing the instrument may have facilitated speech production. Rhythm / speech may also have assisted with self-expression and social functions. "Chanting" was a term commonly used to describe the use of rhythm and speech in these contexts.

Rhythm tests were mentioned 4 times in the literature. These tests were techniques of assessment. Tests mentioned include the *Musical Perception Assessment of Cognitive Development*, the *Music Therapy Physiological Measures Test*, and the *Musical Improvisation Rating Scale*. The assessment of rhythm via percussion instruments was employed to evaluate areas of cognitive, physical, and/or social functioning.

Rhythmic grounding was mentioned in the literature three times. Rhythmic grounding consists of producing a consistent simple pulse with which others can relate and interact musically. Therapists may initiate the technique of rhythmic grounding to offer structure to an improvisation. Rhythmic grounding techniques included the terms "ostinato" and "heartbeat." Sound production was mentioned as a specific technique twice in the literature. In both instances, sound production was related to potentially assisting aural perception of people with hearing impairments.

Imagery in conjunction with percussion was mentioned twice in the literature. The therapist facilitated imagery by providing a scenic story while clients were playing percussion. Clients chose whether to close their eyes or not. Both articles mentioning imagery utilized the Health Rhythms[™] protocol.

Miscellaneous

Miscellaneous techniques consist of those techniques mentioned only once in the literature. Therapist initiated contact was used with an infant in a medical setting in order to maintain eye contact. Active and passive listening of repetitive drumming were used to measure susceptibility to hypnotism and differing mood states. One article noted the use of rhythm notation to structure specific rhythm activities.

Psychological Theories / Techniques

Established therapeutic theories were the basis of some techniques. These theories offered a dimension to the technical processes (primarily improvisations) that is worth mentioning. Jungian analysis and archetypal metaphor played a role in some improvisational techniques. Psychodrama was used and enhanced through percussion improvisation. Ken Wilbur's ideas, presented in the *Spectrum of Consciousness* (1977), were explored through improvisation. Freudian analysis was applied to improvisations in one article. The Gestalt concept of "living in the moment" was discussed in reference to improvisational processes. Satir's process of human validation was mentioned in conjunction with improvisation, and family therapy theories were applied to percussion improvisations in some articles.

Summary of Techniques

Results of the 106 studies published between 1980 and 2003 provide ample evidence to support conclusions that percussion can function effectively in music therapy. Percussion was used with nearly all client populations. A variety of instruments was employed in the studies. A large array of therapeutic aims was addressed, and a diversity of techniques and theories were employed to achieve those aims.

CHAPTER V

CONCLUSIONS

The intent of this study was to understand and to communicate the functions of percussion in music therapy and the techniques with which those functions were performed. Through review of the literature, the two research questions that guided this study could be answered.

Research Question One: Why is percussion used in music therapy?

The functions of percussion in music therapy are vast and varied. According to the results of this content analysis, percussion is used in music therapy to promote

(a) social interaction, (b) self expression and self awareness, (c) communication,

(d) emotional awareness and release, (e) movement and body awareness, (f) attention,

(g) meaningful activity, (h) cognition, (i) rapport, (j) relaxation, (k) evaluation,

(l) sensory integration, (m) behavior management, (n) vocational awareness,

(o) spiritual awareness and progress, (p) auditory perception, (p) coping skills, and

(q) immune function.

In summary, percussion functions in music therapy to enhance social interaction, communication, expression, self-awareness, cognitive skills, sensory awareness, motor abilities, and physical, emotional, and spiritual well-being. In order to understand the use of percussion in addressing these goal areas, one must consider a larger question. What

salient feature or features does percussion possess to function, both generally and specifically, as a tool in the field of music therapy?

Social Interaction

Group musical experiences can facilitate social interaction and social bonding. The literature mentioned the prevalent use of percussion for social awareness and self-awareness / self-expression goals. In many instances, percussion makes an ideal choice for group music therapy instrumental interventions. Social interaction may take place through the musical experience itself or through verbal processing afterwards, but the point is to allow the experience to be unencumbered by musical barriers.

Physical barriers may hinder social interaction. Percussion instruments are generally smaller and less physically restricting than many other instruments.

Furthermore, most percussion instruments are portable and can be arranged to facilitate social interaction (e.g. positioned to form a group circle with clients facing inwards or positioned in between two people).

Fiscal considerations will always factor into the feasibility of using music therapy services, whether provided by a private therapist or by a therapist funded within an institution. Musical instruments cost money, and therapists must approach their sessions with this in mind. Percussion instruments are relatively inexpensive, which is another reason that makes them ideal for group use in many settings.

Communication

Music is a unique language. Percussion offers the layperson an immediate entry into the language of music. The use of rhythmic chanting and percussion offers participants the possibility to internalize language through sensory reinforcement.

Percussion may help clients to develop their musical language and their communication skills simultaneously.

Self-Awareness, Self-Expression, and Emotional Expression

Musical encounters can foster self-awareness. Clients may view pitched instruments with apprehension and anxiety, because of melodic expectations they set for themselves. The accessibility of percussion may offer clients a more contained musical experience with which to explore their musicality. The immediate feedback offerred percussion experiences can offer each client a direct sense of accomplishment.

Musical encounters can also offer an avenue for self-expression and emotional expression. Percussion instruments offer a variety of timbres, shapes, sizes, and dynamic levels, allowing for clients to choose instruments which best suit their expressions. Percussion instruments are often loud and demand attention. Many percussion instruments are also highly durable, making them appropriate for loud play. Ambient percussion instruments, such as gongs, chimes, singing bowls, and ocean drums, may offer the client more contemplative forms of expression.

Movement

Music does not exist without motion. In order to create music, one must move.

Percussion facilitates movement, body awareness, and motor skills. While most

percussion instruments involve primarily gross motor movements, some can be used to
improve fine motor movements. Percussion instruments are varied, and many are mobile,
so they are able to address vertical, horizontal, and other spatial planes related to motion.

If it is true that rhythmic impulses and perceptions are expressed most convincingly
through percussion, then the medium should become a primary choice for facilitation and
measurement of rhythmic perception and movement.

Meaningful Activity and Well Being

Music creates meaning. Percussion can create meaningful activities. The literature mentions percussion and meaningful activity primarily in relation to the geriatric population (Clair, 1990; Clair, 1991; Clair, 1996; Reuer, 1995). Again, the accessibility of percussion plays an important role here. It appears that rhythm, developmentally, is the first musical skill gained (Radocy, 1997) and the last musical skill lost (Clair, 1996). Because of this, people are more likely to find musical success and meaning through rhythm than through melody or harmony. Rhythm is most convincingly performed through percussion instruments.

Cognition

Music offers cognitive structure and focus. The rhythmic nature of percussion makes it appropriate for use with tasks involving temporal cognition and academic skills.

Rhythms combined with percussion instruments can also be used for counting and spelling. Percussion can be used to maintain visual attention or attention to a task.

Rapport

Therapist/client interaction is the crux of all therapies. Music allows connection between music therapist and client. Percussion instruments generally do not create unnecessary physical or musical boundaries. Therefore, appropriate techniques using percussion instrumentation can be used to build rapport.

Relaxation

Music can facilitate relaxation. Although percussion instruments are often considered to be upbeat, arousing, or even agitating due to the staccato and syncopated nature of their performance, the literature demonstrates that appropriate uses of percussion can reduce stress levels. Repetitive drum rhythms, which are played by or actively listened to by clients, have been noted as promoting relaxation (Kenny, 2003; Koebel, 2001) and increasing positive mood states (Bittman, 2003). Also, some percussion instruments, such as rainsticks, offer ambient sounds that may be perceived as relaxing.

Sensory Awareness

Music can create a unique awareness of the senses. Percussion can facilitate aural, kinesthetic, and visual awareness, as well as the way these senses interact with each other. Many percussion instruments offer sensory feedback. The vibro-tactile response of a drum can reinforce proprioceptive and kinesthetic awareness. The variety of percussion

instruments offers a spectrum of timbres to explore, and some percussion instruments have uniquely textured surfaces.

Spirituality

Music offers us a way to connect spiritually with one's self and/or with others.

The cultural and spiritual significance of percussion instruments and their respective cultural or religious traditions can provide clients a traditional or new context with which to explore their spirituality.

Research Question Two: How is percussion used in music therapy?

According to the results of this content analysis, percussion instruments form the basis of many therapeutic techniques, including (a) improvisation, (b) group drumming, (c) metaphor and role play, (d) rhythmic imitation, (e) instruction and performance, (f) accompaniment, (g) structured rhythm activities, (h) rhythm testing, (i) rhythmic grounding, and (j) imagery. Some literature noted the use of two or more techniques simultaneously. For example, group-drumming techniques may have included improvisation or structured rhythm activities, and improvisation was often aligned with role-playing and metaphor techniques.

Improvisation

More studies discussed the use of improvisation than any other technique.

Improvisation was used in individual and group sessions to promote self-awareness, expression, social interaction, and rapport building. Improvisational techniques varied and may have been supplemented by other techniques.

Musical improvisation in therapy is a means with which to explore music, unhindered by explicit structure, but having a musical counterpart with which to reflect. For these reasons, it makes sense that improvisation is aligned with self-awareness, expression, social interaction, and rapport. Percussion relates well to musical improvisation, because of its accessibility and variety.

It must be noted that musical improvisation occurs along a structural continuum. Therapeutic uses of improvisation require a structure that maintains the client's safety and facilitate the desired therapeutic aims. This structure is referred to as a "container." In regards to this reference, a small container is one that utilizes the most structure, while larger containers offer less structure. Examples of containers include rhythmic grounding as employed in some improvisations, as well as therapists facilitating and moderating role-playing improvisations.

Group Drumming

Music therapists create group interventions for many clinical reasons. Group drumming is a therapeutic technique used with many client populations, ranging from corporate clientele to people with dementia. The group setting is commonly used to promote social awareness, interrelatedness, and social interaction. Drums and percussion are viable for group music therapy because of their portability, accessibility, affordability, and adaptability. In order to facilitate group drumming, a music therapist should have a collection of activities that range in levels of structure and containment, and work to achieve various goals.

Role Playing and Metaphor

Music therapists can use music to evoke symbolism and metaphors and to enhance role-play. Throughout the history of world percussion, instruments have been used as an embodiment of spirituality, language, community, mood, and expression.

These areas make percussion play ripe for metaphorical and role-playing considerations.

The diversity of sizes, shapes, and materials of instruments can also serve as a basis for comparative metaphors between/among clients.

Rhythmic Imitation/Rhythmic Matching

Music therapists can create structures with which clients can relate to each other. Percussion can offer rhythmic structure and inter-relatedness through imitating and matching rhythms. Learning to match clients rhythmically, which involves meeting them where they are, and using that meeting to progress therapeutically, is an important skill for the music therapist to learn. Rhythmic imitation requires active listening and active response from both the therapist and the client. Concepts such as *entrainment* and the *iso-principle* may deepen the understanding of this skill.

In its essential form, entrainment is a process of physics in which two or more moving objects will influence each others pulses (or frequencies) to synchronize. Christian Huygens first noticed the entrainment principle when he observed that two pendulum clocks could pull each other into synchrony (Bradt, 2001). In theory, entrainment occurs in nature in order to conserve energy. According to Leonard (1978),

nature seeks to create the most efficient energy state, and it takes less energy for objects to pulse together in the same rhythm than to move in opposition to each other.

Entrainment can be observed as a physiological phenomenon. Birds flying in groups tend to match their wing flapping rates. Two people walking together will begin to walk in rhythm. Two women who live together may see their menstruation cycles begin to coincide. In this same sense, we can consider the potential of the rhythmic pulse of music to entrain two, or many, people together in a common performance pulse.

The *iso-principle* can be viewed as an entrainment technique. First coined by Ira Altschuler, the iso-principle asserts that matching music to client mood or movement, and gradually changing the music by small amounts, may alter the temperament and/or movement of the client (Davis, Gfeller, & Thaut, 1992).

Rhythmic matching can play an important role in facilitating music therapy experiences. Rhythmic imitation appears somewhat less involved with entrainment and the iso-principle, but can offer reflection and reinforcement if the client is leading the imitation. Rhythmic imitation led by the therapist is not related to entrainment, but can facilitate active listening and response.

Performance and Instruction Opportunities

Music therapists can use unique formal performance and instruction/learning opportunities for some therapeutic aims. Percussion instruments add to the uniqueness of performance. The reviewed literature made notable mention of West African drum

instruction and performance, as well as of traditional drum set instruction and performance. Each instrument served different functions.

African drums were used to promote self-awareness, group awareness, and vocational awareness (punctuality and dedication). Traditional African drumming is a community based event, and therefore lends itself well to structured group and self-awareness. In each case, the cognitive functioning level of the population was relatively high.

Drum set instruction and performance was used for enhanced body awareness and evaluation. The multi-dexterity required to play the drum set makes it an appropriate instrument for these purposes. In each case, simple drum set patterns were taught and performed.

Accompaniment

Music therapists may use percussive accompaniment to promote active listening.

They may provide percussive accompaniment or have their clients do so. The chosen accompaniment instrument varies, based on the purpose of accompaniment and the other instruments being used.

Role Play and Metaphor

Music therapists can create musical roles to achieve therapeutic aims, or they can create musical soundscapes with which to enhance role-play and metaphors. Musical accompaniment and musical solo play are roles that may support clients and allow clients to support others.

Music therapists can create environments of safe exploration for their clients. The use of music and imagery has become a common technique in music therapy practice, and in recent years, the use of percussion has become a more common tool for such. The use of music and imagery in these instances should not be confused with the *Bonny Method of Guided Imagery and Music*. The music and imagery utilizing percussion consists of improvised group drumming, and invitation for clients to close their eyes, and a facilitator to offer a visual image, such as a beach. The *Bonny Method* is conducted by a formally trained facilitator and uses specifically sequenced classical music to evoke imagery for the client. During the process, the client and facilitator are verbally processing the images, so that the facilitator can support and enhance the client's imagery. It must be noted that any use of imagery can be potentially harmful to clients, and that any music therapist should seek advanced training before venturing into the use of music and imagery. The studies that used percussion and imagery were aligned with the HealthRhythms The protocol (Bittman, 2001; Bittman, 2003).

Discussion

A process lies within all research work. Included in that process are the motivations of the researcher, the problems encountered during the study, and the new knowledge acquired by the researcher during the process. The following is a summarization of the researcher's process.

Delimitations

The researcher initially planned to include the use of rhythm in music therapy in the content analysis and resulting manual. After a review of the literature, two important points were realized. First, the concepts of perceived and performed rhythm are incredibly complex and difficult to define. Second, a philosophical disparity existed between the concepts of rhythm and percussion in the literature. Rhythm was often related to studies discussing perceptions or behaviors and had nothing to do with percussion. Many rhythm-based studies were highly experimental in nature, with specific protocols looking to achieve specific outcomes. The researcher realized the potential difficulties in communicating rhythm and percussion succinctly and cohesively due to these two points, and decided to delimit the study by eliminating those studies that focused primarily on rhythm. Some discussion of rhythm and percussion existed in the literature that provided the subject unity, and this allowed the researcher to feel comfortable discussing some rhythmic concepts in the instructional manual.

Literature

Some difficulties were encountered locating literature, which in turn affected outcomes in the content analysis. Although the researcher had overall success locating journal articles related to database searches, a few articles were unobtainable due to publishers making changes in journal ownership. Also, articles from the years 2002-2004 were more difficult to acquire than articles from earlier years. The most recent issues of

certain journals were unavailable through the inter-library systems. This may have affected the literature amount by yearly increments.

Instrumentation was often difficult to ascertain and categorize. Instrumental descriptions were as vague as "drum" or "rhythm instrument," or on occasion, were merely mentioned as "percussion." Occasional misspelling, misnaming, or misrepresentation of percussion instruments also occurred. While all the information was informative and beneficial, the ambiguity and occasional errors in the literature appear symptomatic of the general lack of practical percussion education we receive as music therapists.

Content Analysis Format

Content analyses carry certain inherent weaknesses. While the general offerings of a content analysis offer an overview of the literature, the details of each study become much less discernible. Many studies focused on multiple functions or techniques that consequently were lost in the resulting analysis.

Bias

During the research process, the researcher was confronted with reconsidering and reexamining assertions about music therapy in general and the use of percussion within it. While not presenting any blatant surprises, the literature offered the author a broader understanding of percussion in the field of music therapy. The researcher also became more aware of the depth of certain techniques, such as sensory integration, entrainment, and the use of imagery. In some cases, the literature appeared to have

difficulty defining these techniques adequately, making it difficult to relate them specifically to instrumentation.

The researcher must readily admit to his biases and how they may relate to the research. In order to control this bias, the researcher attempted to (a) ask specific research questions, (b) define all items related to the research questions, (c) answer both research questions in every study and note the answers in Table 1, (d) generalize answers to the research questions through analysis, offering verbal and visual explanations for each, and (e) relating conclusions to the literature. The researcher's advisor also assisted, which helped to maintain content validity of the research. The resulting instructional manual is also related to findings from the content analysis, but the methods presented are based in part on personal experiences and biases.

Recommendations

The literature of the last 24 years has offered, in both its strengths and weaknesses, valuable information concerning the future of percussion in music therapy. Research has presented both practical and theoretical information with which to build practice and pedagogy.

Further Research

Several areas of additional research would add greatly to the findings of this content analysis. First, more information on the clinical uses of percussion would likely offer new ideas and substantiate findings offered in this study. Clinician interviews may be an appropriate avenue to add to the body of knowledge concerning clinical percussion

use in the field of music therapy. A survey of university music therapy programs could offer a better understanding of how percussion use is currently taught in music therapy curricula. Second, research related to the use of rhythm in physics, physiology, psychology, and music therapy could be explored further and related to percussion. Finally, explorative comparisons of ethnomusicology research and music therapy research may continue to deepen the understanding of percussion music and the human experience.

Education

Music therapists and music therapy students are in need of practical resources that discuss how to use percussion in their practice. Music therapy universities may need a manual that offers a practical yet challenging approach to teaching percussion as it relates to the field of music therapy. A manual is introduced in the appendix of this thesis.

Further research mentioned above could be geared towards expanding this manual, so that interested parties can reference a practical, engaging, and complete guide to percussion as it relates to music therapy.

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APPENDIX:

INSTRUCTIONAL MANUAL



Percussion Techniques in Music Therapy



Bill Matney, MT-BC

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iv

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Introduction

Music therapists have begun realizing the growing potential of percussion as a therapeutic tool over the past 20 years, and the last ten years have witnessed a surge in interest, as noted by the literature. The current *American Music Therapy Association Professional Competencies* include 1) the ability to play percussion alone or in an ensemble setting, 2) the ability to improvise on percussion instruments, 3) knowledge and maintenance of non-symphonic and ethnic instruments, and 4) the ability to demonstrate sufficient technique for facilitating rhythm based experiences (2004). Yet, there is little available in terms of a compendium written specifically about the use of percussion in music therapy.

The intent of this manual is to offer a practical method of using percussion and rhythm in music therapy. The manual is based on a content analysis of literature discussing the therapeutic uses of percussion (Matney, 2004), both from the field of music therapy and from related fields, as well as from my personal experiences as a music therapist, percussionist, and finally from my growing experiences as a percussion teacher and music therapy teacher.

In the same way that we study music history, music theory, and instrumental technique so they can be applied to voice, piano, guitar, autoharp, wind instruments, conducting, songwriting, and so on, we can also study history, theory, culture, and technique as they are applied to percussion. In order for us to grow as music therapists, we need to be competent musicians on many instruments, including drums and other percussion instruments. As simple and accessible as a drum may appear at the outset, it is as difficult to master as any other instrument.

Many music therapists have told me that "there is only so much you can do with a drum," or "I just don't know how to use drums/percussion in my practice." I certainly do not wish to purport that drums are more important than any other instrument, but I do hope that this manual offers a deeper understanding of the possibilities of percussion and rhythm in music therapy.

This manual attempts to offer the music therapy student digestible yet challenging, beginning technique on many percussion instruments commonly used in our field. This manual is intended to start students off with a basic understanding of percussion, but nothing can replace the reflections and mentorship of a good teacher.

This manual also strives to reflect upon some of the therapeutic functions and techniques potentially related to percussion in music therapy. Pictured, notated, and recorded materials offer the reader a multifaceted and practical approach to learning instrumental techniques. Numbered experientials focus primarily on therapeutic functions and techniques. Some of the experientials are based on ideas from the literature, and some are my own. However, the point of the book is not to lay out therapeutic protocols or rigid activities as much as to offer students a springboard with which to create their own interventions, hopefully refining, building upon, and improving those presented here. Workbook-like assignments offer the student creative input into the experiences, and may be conducted in class or as homework assignments.

Because time may be an issue for the class, professors are encouraged to review the manual and consider where they feel the time is best spent for their students. In some cases, multiple experiences reinforce the same concepts, and

therefore can be eliminated.



Why Tataku?

The word tataku (tah-tah-koo) is Japanese in origin. Loosely translated, it means "to strike," "to hit," "to beat on a drum," or "to beat out a rhythm." I was introduced to the word tataku by my first music mentor; a percussion teacher with whom I began my formal training about 10 years ago. There has since been a recording of the Kodo Drummers with the same name. The word appears to imply a motivation; a reason for drumming. In music therapy, it behooves us to understand musical motivations, and how they may be applied to our practice. Percussion has many salient features that make it useful in music therapy practice.

So..... why do we "tataku"?......

- Percussion is inviting: No musical training required to play and enjoy, but also as potentially challenging as any other instrument. And let's face it...hitting a drum is fun!
- Percussion is physical: Playing percussion requires movement and sustained physical activity, which are basic human functions.
- Percussion is dynamic: Loud or quiet, long or short sounds, the range is available to you through percussion.
- Percussion is various: The largest group of musical instruments in existence! So many choices!
- Percussion is expressive: A great way to express yourself and your emotions.
- Percussion is interactive: Many percussion instruments offer immediate feedback to their players. Percussion also creates minimal physical barriers between people, making percussion useful for group activity.
- Percussion is novel: Although it is the oldest instrument besides the human voice, many people have little experience with percussion instruments, and there are always new ones to explore when you get sick of one.
- Percussion is cultural: So many instruments from cultures around the world can offer us new musical and social perspectives.
- Percussion is visually pleasing: Instruments come in all shapes, sizes, colors, and may be ornamented.
- Percussion expresses rhythm more convincingly than any other musical instrument: But don't take Gaston's or my word for it. Try it for yourself!

Percussion: Origin and Classification

The term percussion comes from the latin word *percussus*, meaning to strike. In a general way, percussion instruments may be defined as those instruments that produce sound when struck. Some percussion instruments are explicitly struck, while others are shaken (maracas), scraped (guiro), or create sound through a keyboard (such as the piano or celeste).

Because so many percussion instruments exist, and their means for sound production are varied, percussion is formally classified into four categories. Most percussion you encounter will belong to one of the first two formal categories.

- Idiophones: Instruments which produce sounds through the vibration of their entire bodies, such as a cymbal or triangle.
- Membranophones: Instruments which produce sound through the vibration of a membrane or skin. All drums are membranophones.
- Chordophones: Instruments which produce sounds through the vibration of strings, such as a dulcimer or harpsichord.
- Aerophones: Instruments which produce sounds through air columns, such as a 'bull roarer' or a slide whistle.

We can also classify percussion instruments by their:

- pitch
- timbre
- region of origin

Pitch and timbre considerations will be mentioned in instrument descriptions, group percussion considerations, and the drum circle section. You will also notice creative classifications, such as element and weather metaphors related to percussion instruments, in the ambient percussion section.

Body Percussion

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Pown to Basics: Body Percussion

A percussion instrument can be anything you strike to make music. Most things that you strike will make an audible sound, and your body is no different. The "history of drumming" likely began with the clapping of hands and stomping of feet. To this day, contemporary classical composers write works specifically for body percussion, and many dance troops specialize in it as a performance art. If you've seen STOMP perform, you've probably seen a glimpse of what is possible with body percussion (and if you haven't seen them, I highly recommend your doing so). A more simplified and perhaps more popular sound example is found in the introduction to Queen's We Will Rock You.

- Sing this rhythm together using the CD (track 1) and the notes and words below.
- Try performing this without the written music, but rather by listening to yourself.
- 3. Play this rhythm together as a group.
- 4. When the teacher cues the group, focus in on someone else who is playing. Try to listen specifically for their sound. How is it different than yours? How is it the same? Repeat this with a few different people.



Just for fun, here is a more advanced example, excerpted from a dance entitled "Bushwhackers." The CD (track 2) will play examples of the first bar only, second bar only, and then the two combined. Repeat the above instructions for this rhythm.



Sidenote: All music offers us an active way to "listen out", to pay close attention to our surroundings. Sometimes we get so caught up in the notes, licks, and runs "as written" that we forget to listen for the sound. Taking time to practice simple listening, such as presented in the above exercises, is important for the musician and the music therapist.

Body Percussion; continued

Experiential 1: How many body percussion sounds can you make?

1.	Create a list of body percussion sounds. We've covered clapping an stomping, but there are plenty more.
	,
3	
	*
	song that requests each movement individually (along the lines of "If You're Happy and You Know It"). Include lyrics, melody, and chords. What client populations and functioning levels might this kind of song may be useful with?
3.	Using two body percussion sounds from your list (#1), orchestrate a simple one bar rhythm phrase in 4/4 time. Notate the phrase, and be able to perform it / teach it by rote. What client populations and functioning levels might this kind of activity be useful with?
١.	Try having two people teach their rhythm phrases to the class. Split the class in half and play the two rhythm phrases together, with the creators leading their respective half of the class. Listen to how the rhythms relate to each other.

Sticks: Strikers and Concussion



Sticks, Mallets, and Brushes....oh my!



Sticks: Drum sticks are made of wood and come in different girths. Many have a shaped head. Sticks offer sharper, brighter, and louder sounds when struck against most percussion instruments. They are also likely to cause damage to instruments not designed for them, such as hand drums and marimbas.



Mallets: Mallets consist of the shaft and head. Shafts are made of various woods, plastic, and sometimes metal. Heads are made of metal, hard rubber, soft rubber, or rubber cores wrapped with yarn. Depending on the hardness of the mallet, many different sounds can be created on percussion instruments. Soft mallets are safe on most drums, and are commonly used with bass drums, paddle drums, marimbas, and gongs.



Brushes: Drum brushes are usually made of metal. They can strike or brush against instruments, offering different sounds that all tend to be subtle. Shown on the left is a bamboo brush type stick, called a hot rod tm. The sounds that it offers fall in between that of a brush and a regular drum stick

Holding Sticks, Brushes, and Mallets

At this point, it is important to briefly mention how to hold sticks and mallets. Many people do this naturally, but the following pictures may help clarify some questions.



When you pick up adrum stick, the main point of contact is known as the *fulcrum*. This point lies between your thumb and index finger, as shown in the picture on the left.

Fulcrum

This point of contact should lie somewhere between 1/2 and 3/4 of the way down the drumstick, as shown on the left.

Once you have the fulcrum in place (which should **not** be tense or tight), then your fingers can lightly wrap around the drum stick, as shown on the left. Keep in mind that your hands should not feel tense, but rather **relaxed and comfortable**.

Stick and Mallet Adaptation

As you can see, the general technique required to hold a stick or mallet necessitates a combination of *pincer grasp* (holding between thumb and forefinger...where the fulcrum is), and *palmar hand grasp* (holding between fingers and palm). You will encounter clients that do not have the ability to hold sticks or mallets in this fashion. You will also encounter clients who have limited ability, and require lightweight items in order to maintain their hold. The following is a brief overview of some approaches to assist in adaptation. A reference guide found at the end of this manual includes references to thorough books on instrumental adaptation and some companies which make adaptive mallets and percussion supplies.

No pincer grasp:

- Sticks and mallets can be played without the fulcrum, but the range of motion becomes more limited. Therefore, the instrument being struck should not be placed horizontally, but rather tilted or vertically.
- Some mallets have transverse handles that only require palmer grasp. Others types of handles include knobs and circles.

No palmar grasp:

 Using a glove with a small hole placed at the upper palm just under the forefinger, insert a stick or mallet through the hole and under the bottom of the glove, such as shown in the picture below. Extra Velcro™ connecting the forefinger to the mallet may be helpful, depending on the type of glove you are using.



Use elastic bands, moleskin, and Velcro™ to create a band that lies across
the palm. You can insert sticks and mallets, as well as other percussion
instruments, under these bands. Some companies also make this type of
band.

Strength:

 Look for lightweight sticks and mallets. A dowel rod and a cork can create a simple, lightweight mallet for those who need something less substantial.



"Rhythm Sticks": A New Name for An Ancient Instrument

Among the oldest created musical instruments in the world are clappers or concussion sticks; sticks that are struck against each other to create sound. The ancient sticks may have been made of wood, bone, or rocks. Evidence of concussion sticks dates back to ancient Egypt. Prehistoric rock drawings of dancing figures and the pottery of the 4th millennium in Egypt depict clappers with curved blades held in one hand. Clappers in the form of marrow bones and cleavers were integral instruments in the music of the butchers of England and Scotland during the Baroque era. Australian Aboriginal tribes continue to use clapper sticks in their indigenous musics, and much of Afro-Cuban music uses a concussion stick known as clave (which also denotes specific rhythms). Today, we commonly use an instrument similar in classification for music education and music therapy. We call the instrument rhythm sticks.

Rhythm sticks are wooden rods approximately 15 inches in length by 1/2 inches in diameter. Often used for elementary music education, rhythm sticks can also work well in music therapy settings. They are inexpensive, portable and easy to maintain.

If you strike the sticks together, you get a staccato, "woody" sound in return. Some rhythm sticks are grooved, which allows the player to make scraping sounds by rubbing the sticks against each other.

Experiential 2: Names and Rhythms

sticks, striking the name rhythm out.

When you speak a name, a phrase, or a poem, you speak it in a rhythm. You can transfer the rhythm to any instrument, and rhythm sticks work well.

••	if you can).
,	
2.	Say each name to yourself, and then play each name using the rhythm

Write down the names of three famous people or characters (first and last

	Think of three names that you could use with a geriatric population and write them below (e.g. Abraham Lincoln).
5.	Think of names that are popular with of children (e.g. "Barney", or "Bob t Builder").
-	• •
-	
_	•
	Think of a small phrase, nursery rhyme, song lyrics, or a poem that you could play a rhythm to (such as "Hickory Dickory Dock" or "There's no place like home.")



Clave: A Key to Afro-Cuban Music

The clave (klah'-ve) is both a percussion instrument and a set of rhythms. The instrument consists of two short hard wood sticks that are struck together. Traditionally, the larger and lower pitched of the two claves are held stationary, suspended above the palm to create resonance (see picture below), while the smaller and higher pitched clave is used as a striker. Many claves you see these days are the same size and pitch, but the playing technique remains the same.



The sound of the clave is similar to that of a high pitched wood block. It is thought that the first claves were made of dowels used to hold the ropes to the masts of sailing ships. These dowels were known as *llaves* (yah'-ves), which is Spanish for "keys". This is apparently where the name clave was derived.

The following "clave" rhythm is one of the more simple patterns, and can be found in many types of music. It can be, and is, used on many instruments. Try playing it with claves or rhythm sticks. Refer to the **CD** (track 3) if you wish.



Shakers and Rattles

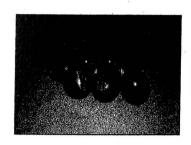


An Introduction to Shakers and Rattles

Shakers and rattles, two terms that generally mean the same thing, are considered some of the oldest percussion instruments. Along with clapper sticks and scrapers, these instruments existed way before the drum. Ancient hieroglyphics denote the use of rattles by the ancient Egyptian culture. Interestingly enough, the rattle appears to be a commonly used instrument by *Shamen* (shah'-men) of different cultures. Shamen often used rattles in healing ceremonies, and in some cultures, they continue to do so.

Simply put, a shaker or rattle consists of a larger object that you shake (such as a gourd or can), and many smaller objects (such as rice or beads) that are either enclosed in, attached to, or surrounding the larger object. When the shaker is moved, the smaller objects strike the larger and create many small sounds, almost simultaneously, giving us the impression of a "swish" or "chick" sound. Shakers range in size from very small (egg shaker) to large (some gourd shakers are as large as small hand drums.) There are so many types of shakers and rattles that I have decided to narrow the scope to the more commonly used shakers in music therapy practice. In the ethnic percussion section, other shakers are discussed.

Shakers and rattles tend to be softer in sound than drums (although, some can be loud). Some shakers, such as egg shakers, can be a safe instrument for someone who is not comfortable standing out (or in some cases, too comfortable standing out!!!!).



Egg Shakers

Like many shakers, egg shakers create a soft "chick"ing or "swish"ing sound, depending on how you shake them. One of the great things about shakers is how portable they are. They can be moved all around while you play them, played around different body parts, and even passed around.

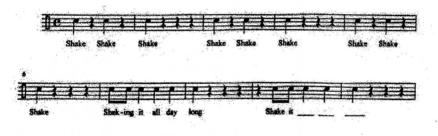
Experientials 3 and 4 are created with your development in mind. They may have some use with higher functioning clientele as well. Experiential 5 may have more widespread clinical use, but it is also only a springboard for your creativeness.

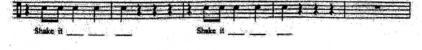
Experiential 3: Exploration – For a few minutes, explore the different sounds you can make with an egg shaker. Think of changing the 1) dynamic level, 2) speed of shaking 3) how you are holding the egg, 4) which direction you are moving the egg (sideways, up and down, "swirling" in circles, etc.) and 5) rhythms.

Experiential 4: Listening and Watching - Set yourself in a circle with two or more people. Give each person an egg shaker. Have one person begin shaking his/her egg from nothing, to soft, to louder, back to soft, and back to nothing. Before the sound fades out completely, a person sitting "next door" begins playing and repeating the dynamic process. This continues until each person has had at least one opportunity to play, if not more. When it is your turn to play, think of using some of the different sounds you created in Experiential 3.

Experiential 5: Body and Spatial Awareness

- A. Write down three spatial locations (e.g. "high", "low", and "over")
- B. Write down three body parts
- C. Using the following rhythm chant, fill in the blank with your above answers. If your body part needs a spatial location in front of it, such as "way up high", "next to your ear", or "over your head", then add it in the extra blank area.

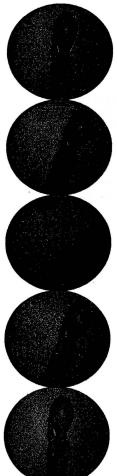








Maracas



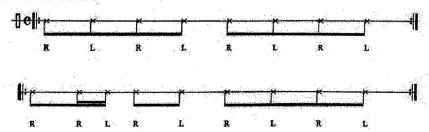
Maracas (mah-rah'-kahs) are a part of the gourd/ rattle family. Maracas originated in South America, apparently via the Taino Indians who inhabited Puerto Rico before Spanish colonization. The first maracas were made of calabash gourds. The seeds were taken out and reinserted into the gourds once they had dried out. Today, maracas are also made out of wood and/or plastic (the plastic ones are more durable, and they tend to be louder). They have handles with which to hold them. By flicking your wrist forward, or moving your arm forward somewhat abruptly, you can create a "tsk" sound with the maracas.

Maracas are often played in pairs, one in each hand. This makes the maraca a useful instrument when encouraging alternating or simultaneous bilateral movements in the arms and/or hands. Of course, you can also offer individual maracas to each person.

How to play (General Technique): Hold one maraca in each hand. Grasp the handle of each with your thumb and three smallest fingers. Extend your index finger so that it touches the shell (see pictures). Using your wrist, flick one of the maracas forward. This causes the beads inside the maraca to hit against the inside wall of the shell. To play consecutive notes, first flick on one maraca and then the other.

Try playing the following two rhythms with the standard technique. R=right hand, L=left hand (note: if you are left handed, you may want to reverse the hand order.

CD tracks 4 and 5



How to help others play: In music therapy, adaptation and flexibility are of the utmost importance. The maraca technique shown above is the "standard," but maracas will create sounds as long as they are shaken hard enough. Clients need to be able to hold the maracas upright by the handle, and feel comfortable moving arms or wrists enough to shake the maraca forward and back. You can also try having clients rotate their wrists (as if turning a door knob), if that is easier or more appropriate. Gloves and velcro can be useful in adapting instruments which usually require hand grasp strength, and the maracas are one example.

Scrapers



Guiro

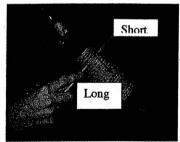
The *guiro* (wee'-ro) is a scraper instrument originating in South America, most likely in Puerto Rico by the Taino Indians. It was originally made out of the gourd fruits from the *marimbo*, a

tropical tree. Ridges were carved into the side of the gourd, creating a raspy sound when the gourd was scraped with a stick. Today, guiros are made from gourds, synthetics, wood, and metal. Some gourds have handles, while others have finger holes. Some use sticks as scrapers, while others use combs. In each case, playing techniques are similar. Sounds usually consist of short scraping sounds and long scraping sounds.

A couple of playing techniques are common with the guiro. The simpler of the two will be discussed here. Hold the guiro in one hand horizontally (using holes or handles if available, with the ridges facing upwards.



In the other hand, hold the scraper as shown in the picture. Short sounds are made with a tap or short scrape across the ridges. Long sounds are made with longer scrapes across the ridges.



Experiment with the guiro by creating long and short sounds. Use the entire ridged area to create long sounds, and a small area to create short sounds. Once you feel comfortable with this, try the following guiro pattern. Refer to **CD track 6** if you wish.

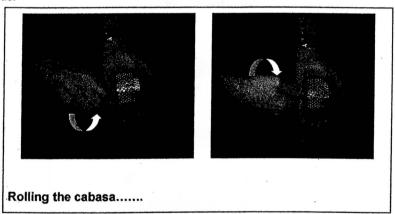


long short short long short short long short short long short short

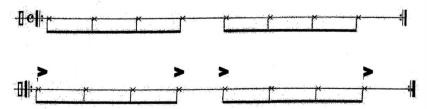


Afuche-Cabasa

The afuche-cabasa (ah-foo'-shay cah-bah'-sah) is derived from the traditional coconut cabasas of Latin America. This more durable instrument was originally created for the drummer of the *Tonight Show*. The afuche-cabasa consists of a textured cylinder wrapped with metal beads and attached to a handle. The beads wrap around the grooved cylinder loosely enough that they can roll across the cylinder and make a bright scraping sound. The beads can also be shaken or tapped against the hand, giving the cabasa three distinctive sounds.



Concerning general cabasa technique, hold the cabasa by the handle and rest the cylinder in the other hand (see pictures). Rotate the hand by turning your wrist side to side (as if you are turning a doorknob). With this technique try playing the following two rhythms at a medium slow tempo. The second is commonly used in recordings. Refer to **CD tracks 7 and 8**.



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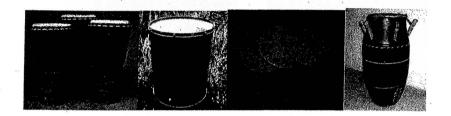
Afuche-Cabasa

The rolling sound of the cabasa uses two hands, and this can be useful with clients who are working to increase two-handed coordination. The cabasa can also be rolled on different parts of the body, such as down the arms or legs, adding to its sensory contributions. You can also tap the cabasa against your hand or leg, and you can shake the cabasa the same way you do a maraca. The following song gives a way to incorporate all three into an activity by changing the first word of each phrase. Refer to the CD (track 9) for a listen as well.



Drums

Drums



Drums are a part of the membranophone family, meaning that they use a vibrating "skin" to create sound. We may use sticks, mallets, brushes, and/or our hands to strike the membrane. Drums come in many shapes, sizes, pitches, and timbres, and can be made out of metal, wood, animal, gourds, synthetic materials, or combinations of these. Some drums are played with sticks, some with mallets, and some with hands. Some drums are stationary, and some can be moved while they are played. Drums are used in cultures throughout the world.

Following is an introduction to some common drums used in music therapy practice. More detailed information on specific drums and their associated rhythms can be located in the ethnic percussion section of the manual.

Paddle Drums





Paddle drums are primarily for music education and music therapy use. The drums shown above are two of the more common hand held drums. They are played with mallets made for the drums, and some also come with nerf-type balls for drum badminton games. The graduated paddle drums (top left) offer a range of sounds from low to high, and can be tuned with a drum lug wrench. The lollipop drum (top right) is colorful and visually pleasing.

To play a paddle drum:

- · hold by the handle
- · strike near the center of the drum head using mallet in other hand

Paddle drums are extremely mobile and yet they are quite resonant and vibrant drums. They are easy to move into appropriate positions, pass around, or even share while playing across from each other. The following experientials illustrate this.

Experiential 5: Paddle Drum Interactive Play A.

- Sitting across from someone else with a paddle drum, have each person hold the drum with your left hand in a horizontal position above your lap and a mallet in your right hand.
- 2. Say the quarter note phrase "My drum, your drum" together, while providing a half note pulse on the drums.
- 3. Every time you sing the word "My" in the phrase, hit your drum. Every time you sing the word "You" in the phrase, hit the other person's drum (but not too hard!).

Experiential 6: Paddle Drum Interactive Play B.

- Sitting across from someone else with a paddle drum, have each person hold the drum with his/her left hand in a horizontal position above your lap and a mallet in your right hand, as shown in the picture above.
- 2. Sing the verse to "You are My Sunshine" while providing a slow to moderate quarter note pulse together on your own drums.
- Every time you sing the word "You" in the song, hit the other person's drum (but not too hard!).

Experiential 7: Paddle Drum Reach and Balance:

- With one partner, choose someone to act as the "client". Give the client one mallet for each hand.
- Using two paddle drums, hold one paddle drum on each side of the client, slightly in front of and facing him/her.
- Have the client take turns hitting each drum. Encourage them to think about shifting their weight to help them.
- 4. Gradually expand the distance between the two drums, causing the client to reach further and shift weight in order to hit the drums. (Note: If client is taller than therapist, it may take two therapists, one on either side of client, to perform this task.

Another great feature about the paddle drum set is its pitch range, which can add a melodic tinge to drumming without the need for expensive sets of drums. The following experientials are geared towards a beginning understanding of structured group drumming.

Experiential 8: Paddle Drum Rhythm Song A:

- 1. With a group of volunteers, give each person a paddle drum and a mallet.
- Decide on a direction for the circle to play in (clockwise or counterclockwise)
- 3. Each person plays his/her drum once, and then the next person plays (in the direction decided). Try to create a consistent pulse. Have someone play the pulse on rhythm sticks if helpful. Sing back the rhythm song you hear while playing.



Hand Drums

Hand drums have become much more prevalent in American culture within the last 20 years. They are also commonly used in music therapy and music education. Percussion companies have picked up on the rising interest, and have developed hand drums of all types. This section of the manual will address a more general understanding of hand drums in terms of performance technique and some therapeutic considerations. While a few hand drums will be exceptions, such as the *bongo* (bon-go')and *doumbek* (doom'-bek), this section should apply to the larger hand drums.

In terms day-to-day durability and sanitation required by our practice, the synthetic hand drums made by larger companies, such as Remo, Toca, and Latin Percussion, are a solid investment. Technology is making these drums sound better every few years, and also making them less expensive.

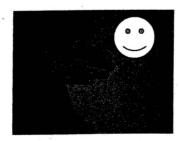
Stick use on most hand drums is a bad idea because the drum heads are not designed to receive that kind of force. However, soft mallets are appropriate and offer clients a way to play if they would prefer not to use their hands. You should also take off all rings and watches when playing hand drums.

The following few pages discuss some general considerations for approaching hand drum play, both for yourself and for the client.

- 1) Breathe and Relax! Breathing is one of the most natural rhythmic things we do, but sometimes we forget to breathe regularly when we are working on something new. Breathing helps keep us relaxed. Be aware of your breathing while you drum. Relaxed drumming always sounds better. Ask yourself "Am I relaxed when I play this, and if not, what part of me is tense?"
- 2) Position the drum so that it is easy to play. Ask yourself "Is the drum too high or too low? Is the drum close enough to me? Is the drum sitting comfortably against me?" Try different positions and see what is most comfortable.
- 3) Do not hit the drum with your thumbs when using the rest of your hand! It can hurt!!!!! There are some drums which you may want to use your thumb by itself, but not when using the rest of the hand.



Instead, make a comfortable feeling "U" with your index finger and thumb to keep it out of the way.



4) "Bounce" your hands off of the drum!

What happens when you throw a basketball to the ground? It rebounds. Your hands should do the same after hitting the drum. Use the energy of the drum to return your arm to its original position quickly (note the picture sequence on page 35). This "pulls" the sound out of the drum, and makes it easier to play phrases with volume and speed. Think of the drum as a hotplate. Hit it and get away from it! Practice this consciously, and eventually it will become natural.

5) You don't have to play hard to play loud! Good hand technique and confidence give you volume, and will not hurt your hands.

6) If it hurts, stop!

This applies to playing any musical instrument. Your body is telling you to stop, so listen to it. Your hands will need to get used to the drum. Be mindful of good technique and how it relates to your body.

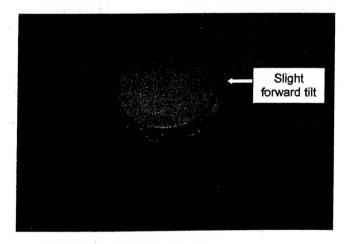
7) Practice technique for consistent short periods of time until playing feels good and natural.

Again, this applies to all instruments, and to most everything in life. Your diligence pays off tenfold in the long run. Internalizing builds your confidence, and allows you to concentrate on more important things, like interaction with your clients!

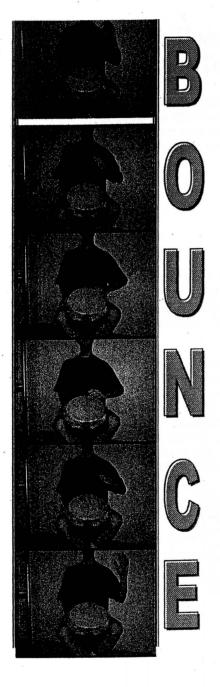
Hand Drum Positioning

Different hand drums are positioned differently to make them easy to play and offer their best sound.

Many of the larger hand drums, such as djembes and congas, require some "tilting" for their sonorous bass tones to stand out. You can hold these instruments between your inner knees and wrap your legs around them (if comfortable) while tilting the drum slightly forward in front of you. This will allow more air to escape from the base of the drum, and will therefore create more sound.



Some hand drums, such as the tubano hand drums and gathering drums, have "air holes" cut into the bottom of them. They are free standing. Other smaller hand drums may be held in between the legs, on the lap, or suspended by a strap worn around the neck.



Let the drum work for you.

Think of your hands effortlessly rebounding... like a basketball...

Or, think of the drum as a hot plate...you want to move off it quickly!!!

Work on bounce consciously and deliberately, and in time, it will become natural.

Basic Hand Drum Sounds: Bass, Tone, and Slap

The following technique applies to all larger hand drums. Some smaller hand drums, such as the doumbek and bongo, require some additional finger technique (which is addressed in the ethnic percussion section). Although larger hand drums are capable of a sound spectrum, three basic sounds can be created on them.

The sounds are:

- 1) Bass
- 2) Tone
- 3) Slap

Singing what you play.

Each of the basic sounds on the djembe can also be thought of as a vocal inflection. Generally accepted vocal counterparts to these basic sounds are <u>Gun</u> (goon) and <u>Dun</u> (doon) for the Bass sound<u>Go</u> and <u>Do</u> for the tone, and <u>Pa</u> (pah) and <u>Ta</u> (tah) for the slap. You can hear examples of these on the CD (track 13).

"Handing": Does it matter which hand I hit with?

Handing refers to the order in which your hands play a rhythm. There isn't an exact way to play a rhythm on a hand drum, but some "handings" are more efficient and natural. The vocal system above is one way to internalize "handings." For example, *Pa* means slap with your *lead hand*. If you are right handed, then your right hand is your lead hand, and your left hand is your secondary hand. **Do** means play a tone with your secondary hand. You will begin to notice that much of the time, your lead hand will hit the downbeats.

Vocal	Sound	Hand
Gun	Bass	Lead
Dun	Bass	Secondary
Go	Tone	Lead
Do	Tone	Secondary
Pa	Slap	Lead
Ta	Slap	Secondary

Exerce Chand Oxum Sounds



Bass:

"Gun" and "Dun"



The bass tone is the low sound of the drum. To create a bass tone sound, hit the center area of the drum with the fleshy part of your palm, found just under the fingers. Remember, keep your hands relaxed and lift those hands back up quickly as if you are hitting a hot plate!



Tone:

"Go" and "Do"



The tone is a mid-range sound. To create a tone, hit the drum area as shown with the flesh of the fingers, using a closed, flat, and relaxed hand (fingers together and straight out). Strike the drum evenly and flatly. Remember to rebound!



Slap:

"Pa and "Ta"

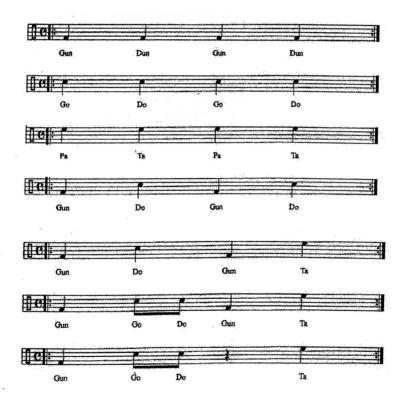


The slap is a high-pitched sound. Slaps take a little more time and effort than the other two basic tones, so this is one to be patient with. First, look at the hand shape in the pictures. Now, drop your arms to your sides and relax them completely. The hand shape that this makes should be similar to the pictures. This is what you want your hand to feel like for a slap sound, a relaxed curved hand with slightly open fingers. To create a slap, hit the drum with a relaxed hand. When your hand makes contact with the drum, flip your inner fingers as if you were flicking water off them. Again, this one will take some time, but your ears will guide you. Every time you make that slap sound, have a "pa-party" for yourself!

Introduction to Hand Drum Rhythms: Singing What you Play

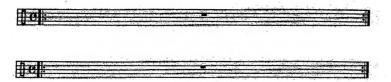
Let's practice the three sounds we've mentioned and move them towards playing some rhythms. If you don't have enough hand drums for everyone, playing on a desk is fine. Use the following instructions for each rhythm.

- "Sing" the rhythm four times with the correct syllables. Refer to CD tracks 14-20 if helpful.
- Alternate between singing and playing the rhythm four times each. Make sure you are playing the correct tone with the correct hand!!!
- 3. Play the rhythm by itself four times.
- 4. Move to the next rhythm and repeat instructions.



Experiential 9: Create your own hand drum rhythms

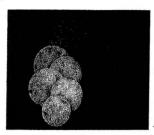
 Using at least two of the three sounds we've discussed, create two of your very own rhythms (in 4/4 time) and write them down with their accompanying syllables. Be able to sing them with the correct syllables and play them with the handing you prescribe.



Play your rhythm with another person's rhythm. Count off together and play. Listen to how your rhythms line up and how they relate to each other. If you are in a classroom, split the class in two and have the rhythm composers teach their rhythms to each half of the class. Then count off and play.

Using Hand Prums in Music Therapy Sessions: Considerations

- 1. While your ability to play a hand drum with some technique and confidence is going to help you to use the drum therapeutically, keep in mind that your clients may not (and in many settings, will not) be able to approach the hand drums in the same fashion. The same can be said for any instrument, and that is why we may open tune guitars and improvise on pianos. Adapt the use of the hand drum to be accessible, enjoyable, and fitting to the goals you are working on. Some rhythm and improvisation techniques briefly mentioned later in this manual may be useful as well.
- For some people, hand drums can be intimidating the first time they encounter them. They are larger and louder than many other percussion instruments. Invite people to play, and make it both fun and funny to play them. Offer other instruments if need be, but honor your clients' safe boundaries.
- Concerning one-on-one sessions, hand drums can be placed between you and a client. You can play together or take turns. You can use simple words or phrases (such as in experiential 2), or sing songs to help structure the pulse.
- Concerning group sessions, hand drums are portable enough to pass around. Hand drums can be used to express and share feelings, as shown in experiential 11.
- In drum circles (which we will discuss later in the manual), hand drums help fill in the holes and move the rhythm forward.

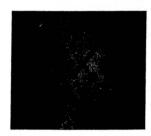


Frame Drums

Frame drums are considered the oldest drums, as they are noted to have existed 6,000 years ago. Middle Eastern, European, Latin American and Native American cultures have each

developed frame drums for use in their rituals and musical traditions.

The frame drum generally consists of a membrane stretched around a thin cylindrical frame, and comes in many sizes. The smaller sized drums offer less sound, and they must be held to be played, but they are lighter and very portable. Larger sizes tend to be more resonant, and can be played in a variety of ways.



The bohdran (bor-ahn') is an Irish frame drum. Many of them have cross bars behind the drum head. You can hold the drum by the crossbars, as shown in the picture. Bodhrans are usually played with one hand or with a bone, a small double-headed stick.

Other frame drums can be held by the grasping the frame as shown to the right....





....or by suspending on your leg with arm support, as shown here.

The latter offers two handed play, but unlike the upright hand drums, frame drums are primarily struck with your lead hand.

Frame Drum technique, a primer:

Frame drums have the same general sounds as other hand drums. However, the frame drum uses more fingers and less full hand to play. Also, at best you have limited use of your non-lead hand, and may only have one hand to play with depending on how you can hold the drum. Keeping these things in mind, experiment with a frame drum.

If frame drums are in shortage, you can substitute paddle drums for the following.

Frame Drum Sounds

- 1. Use your four fingertips to play a pulse on the drum.
- Hit the drum in the center and move outward (towards you) slowly. Listen to the different in sound.
- Keep playing until you are playing your forefinger fingertip on the rim of the drum frame.
- Move back inward to the center. Keep those ears open for the sound changes!

Middle Eastern frame drum technique is generally taught in a similar way to hand drum technique, but with different syllables for each sound. What is important is that you internalize the sounds, and singing associative syllables can help you do that. For fun, you can go back to page 39 and create the same sounds using a frame drum. Since frame drums really don't allow you to alternate hands, try using your lead hand as much as possible. If you can suspend the drum and use your non-lead hand, use it sparingly.



Tambourines: Two Great Sounds That Sound Great Together

The tambourine is considered to be of Near Eastern origin. It was found in various forms in Assyria, Egypt, China, India, Peru, Greenland, the Caucasus and Central Asia. It was used in prehistoric Britain and in Gaul, but its popularity increased with the advent of the Romans. The tambourine is pictured in early art in funeral lamentations, in joyous processions and feasts, and in the hands of angels as. It was popular throughout the Middle Ages in all parts of Europe, and was depicted at that time in a form very similar to today's tambourine.

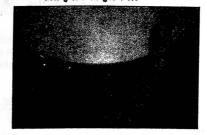
The tambourine is often considered a part of the frame drum family, but also has a shaker-like quality to it. Like all frame drums, the tambourine generally has a wooden circular frame covered by a skin on one side. The tambourine has the distinguishing feature of metal jingles attached to the drum's frame. The jingles add brightness to the sound and allow for the tambourine to be struck or shaken. Some of today's tambourines are made of plastic and may or may not have a membrane head.

Tambourine play can consist of shaking and/or hitting the instrument. In order to hold a tambourine, grasp onto the frame (with the tambourine head on top as shown in the picture. If your tambourine has a finger hole in it, use it as shown in the picture below.

Holding the tambourine



Using the finger hole

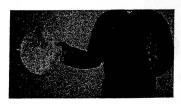


To play the tambourine, raise your arm out in front of you and hold the tambourine in a vertical position, as shown in the pictures. The head of the tambourine should be facing your other hand, so now you can hit the tambourine head against your lower palm if you wish. Shake the tambourine from side to side to get the jingles to rattle. You can move yours arms and/or your wrist to do this. Explore playing louder and softer, faster and slower. In each case, which works best...wrist, arms, or both?



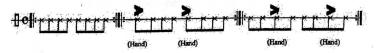


To create accented notes, place your free hand out in front of you and strike the tambourine head against it, like shown below.





Try the following tambourine patterns. Each note represents a shake. Accents are played with the tambourine head striking the lower palm. Once you feel comfortable with these rhythms, make some of your own up. Refer to CD tracks 8, 9, and 10.



You can also tap on the tambourine with your hand or fingers, or make roll sounds by rotating your wrist (like turning a doorknob) quickly both ways.

44

Snare Drum and Tom Drums







Snare Prum

Tom-Tom

Floor Tom

The snare drum and tom drums are drums that you use sticks to play. They are usually made of wood with metal rims, but occasionally they are made of all metal or all wood. Snare drums have two drum heads, while toms may have one or two drum heads. Originally, snare drums used animal gut strapped across the bottom drum head to create a buzzing sound, and they called this part a "snare". Today, snares are made of thin metal strips, as shown below. They shorten the resonance and add a bright cutting timbre to the sound.



Snares

These drums are not played with the hands, but rather with sticks. Snare drums and tom drums tend to be loud, but they can be played with mallets or brushes to help control the volume.

Because of the mobility, cost efficiency, and accessibility of hand drums, snare drums and toms are less popular in our field than they once were. However, they do offer their own unique sounds, and together they make up a large portion of the drum set.

Bass Drums







Bass drum for drum set

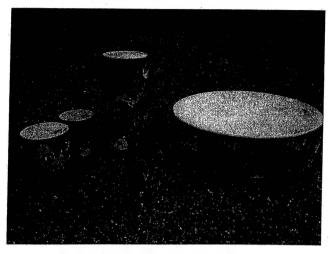


Dunun (doo'-noon)

Bass drums, as is apparent by their name, are drums that generally offer a lower pitch range. They tend to be the large drums in drum ensembles. Because their pitch frequency is lower, they can be distinctly heard, and even felt, when played with other drums. These characteristics make bass drums appropriate for offering a pulse to group activities and drum circles.

Bass drums are usually played with sticks or mallets. As a general guide, synthetic drum heads, such as those found on the *surdo* and bass drum pictured above, are more likely to be played with mallets. Likewise, concert bass drums are played with large mallets. Many bass drums with goatskin and calfskin heads, such as the *dunun* (doo'-noon) pictured above, or the *taiko* (ti'-ko) drums of Japan, use large drumsticks. There is no absolute rule of thumb, but the thickness and durability of the drum head will guide you whether or not to use sticks.

Children's Drums



Worth brief mention are the many children's drums being created by percussion companies. These drums are made of durable, easily maintained, and easily sanitized synthetic materials. The drums tend to be smaller in size for smaller hands and bodies. The small gathering drum, as shown in the right hand side of the picture, allow many children to circle around and play together. Some children's paddle drums are made with special heads that can be written on with dry-erase markers. Other paddle-type drums come in various shapes, which can be useful in some educational settings. All of these drums tend to be lightweight and easily portable.

Because of their size and construction, most children's hand drums have a smaller sound range and are less resonant than their "adult" counterparts. This is their one distinct disadvantage, even with children, who may be very receptive to the sensory feedback of a sonorous drum. That being said, these drums have visual and size features that cater to children.

Metal Percussion

Bells

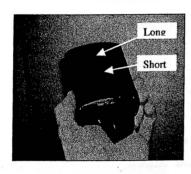


Cowbell



Agogo (ah-go'-go) bell

Simply defined, a bell is a hollow device made of metal that makes a ringing sound when struck. Bells range in sound from brash, short, and noisy to refined long pitches. Some bells are struck by metal beaters found inside them, while others, such as those commonly used in music therapy, are struck with sticks. Cowbells and agogo bells are two commonly found in our field.



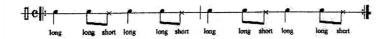
Cowbells are excellent for creating a pulse in a group setting. They are loud, and have a unique timbre. Cowbells tend to have a mid-ranged pitch. You can change the pitch and duration of the sound slightly by changing where you hit the bell. First, look at the picture demonstrating how to hold the bell. Try this yourself. Now, note the two major striking areas mentioned. The area near the middle of the bell (short) produces a shorter, higher pitched sound, while the area approaching the bell produces a longer, lower pitched sound.

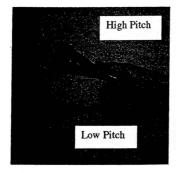
Wood sticks work best on cowbells. You can either strike with the tip of the stick, or with the upper shaft, as shown in the picture on the right. The shaft of the stick is more commonly used. A common cowbell rhythm is supplied in the following experience.



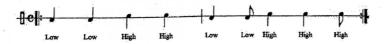
Cowbell Play

- Explore playing the bell using the shaft of the stick on the two striking areas mentioned above.
- Once you feel comfortable with this, try the following rhythm. Refer to the CD (tracks 21 and 22) if helpful.
 - a. First, sing the phrase, using long and short.
 - Notice that in this phrase, the long sound is played on each quarter note. While singing the phrase, play just the long quarter notes.
 - Play the entire phrase on the bell while singing. Use the shaft of the stick.





Agogo (ah-go'-go) bells are a double-belled instrument, with each bell having distinctly different pitches. The agogo originated in Latin America, and may be a descendent of African double bells. They are not quite as loud as cowbells, but their pitch duration is longer. They are also played with sticks, preferably struck by the shaft. The picture on the left demonstrates how to hold the agogo. Presented below is a common agogo rhythm. Refer to the CD (track 23), and sing and play along.



Cymbals and Gongs



Although the exact origin of cymbals and gongs are unknown, research suggests that Turkey, Tibet, and India, and China are the regions where they developed. Both cymbals and gongs belong to the same family of metallic idiophones. Both have unique shimmering qualities, and cymbals/gongs with different metals, sizes, and shapes can sound very different. Also, the instrument you choose to strike a cymbal (brush, mallet, stick), as well as the area of the cymbal you strike, will affect the resulting sound quality. The diagram below mentions different areas of the cymbal.



The parts of a cymbal are labeled above. The bell of a cymbal has a brighter and shorter sound. The bow offers a longer sound than the bell with a slightly darker definition. The edge of the cymbal will offer even longer, darker sounds, and is the best place to hit for a "crash".

Experiential 10: Cymbal: Sounds and Scenarios

- 1. Try playing the different areas of a cymbal using a
 - a. drum stick
 - b. soft mallet
 - c. hard mallet
 - d. bamboo brush
 - e. jazz brush
- Write down sound qualities as you hear them, such as louder/softer, longer/shorter, higher/lower pitched, brighter/darker, more/less punctuated.

	Cymbal Bell	Cymbal Bow	Cymbal Edge
Drum Stick			
Soft Mallet			
Hard Mallet			
Bamboo Brush			
Jazz Brush			

- 3. You are in session and have a client who wants to play cymbal. Create two (individually or as a class) two hypothetical session scenarios in the spaces below (one group session and one individual session) in which you may wish to facilitate a client playing certain sound qualities on the cymbal. To begin with, ask yourself the following questions, and answer in the blanks provided below
 - a) What is this client's general personality/demeanor?
 - b) What are his/her physical abilities?
 - c) What is his/her musical experience?
 - d) What aim (goal/objective) are you facilitating?
- 4. With these factors in mind which striker will you give the client? If important, which area of the cymbal will you invite them to play, and why? Answer in the blanks provided below.

Scenario 1: Group Session				
client personality/demeanor:				
physical abilities:	×			<u> </u>
musical experience:				
striker choice:				
cymbal area:				
reasons for choices:				
Scenario 2: Individual Session client personality/demeanor:				
physical abilities:			************	
musical experience:				•
striker choice:				
cymbal area:				
reasons for choices:		,		

Note: This same experiential can be used with gongs. However, I am under the assumption that cymbals will be much more accessible to most readers.

Ambient Percussion

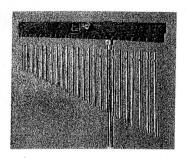


Wind Chimes

Wind chimes have been commonly used in Japanese culture, as noted in Shinto religious customs.

Wind chimes consist of multiple individual chimes, usually pitched in some scale, such as a pentatonic scale. When moved, the chimes strike each other and create differently pitched sounds. The wind chimes may vary in general size, from a few inches to many feet in length, so the pitch range will depend on the set of chimes you have. Chimes tend to be subtle and soft in their dynamic range. Wind chimes are usually arranged in a circle format, so that the wind is all they need to sound. Some wind chimes are made specifically for performance use, such as those pictured below. The chimes on this type are usually set up in one or two long rows. They can be played with the hand or with sticks. Wind chimes are usually made of metal, but some are made of bamboo.

Wind chimes offer a subtle sound that works well as an accompaniment or improvisational instrument. Many are made of pentatonic scales or other scales easily reproducible on pitched instruments, which would make them ripe for musical interaction. The subtle sounds may allow clients a more contemplative form of expression.

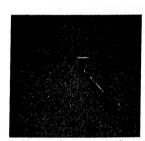




Ocean Drum

The ocean drum is considered to have a history in Mayan culture (using a bushel gourd and deer hyde with seeds), as well as history in Nepal. Today's ocean drums usually consist of a flat cylinder with membrane heads. Metal beads move around inside the drum, and the resonance causes sounds

similar to ocean waves hitting the beach. Ocean drums come in various sizes. Larger sizes offer more sound, and can be used to facilitate large movements, weight shifts, and multiple player opportunities. This drum offers people a new musical experience, and since many people associate ocean sounds with calmness, the drum can provide a relaxing sound environment.



Rain Stick

The precise origin of the rainstick is unknown, but archaeological findings lean towards its ancestry lying within the Togo and Pangwe people of Africa who inhabited Lima and Peru as slaves. The inception of the current rainstick may very well have come about in the 1960's with the popularization of Andean music. Rainsticks consist of a cylinder filled

with beads or seeds that strike against each other and strike against protrutions found along the inside of the instrument. When turned over, the many beads strike the protrusions and create a sound similar to rain.



Thunder Drum

The thunder drum is a recent creation. It consists of cylinder-type double headed drum with a spring attached to one head and a sizable air hole in the drum. The movement of the spring creates loud "windy" sounds, and when it strikes something, the drums sounds similar to thunder.

_	Write down some different types of weather.
)	Playing various instruments (including the ones mentioned on the previous
	age if you have them, but don't limit yourselves to them), emulate these
	Vrite down feelings that you associate with the kinds of weather you listed
ı	bove. For example, you may view sunny weather as "bright and
	neerful."
_	
	· =
	. , = , = 1
16	onsider how you may lead a group "weather report" intervention, where e goals are to express emotions and develop self-awareness. Consider e following options. a. one instrument of your choice, passed around to each clientwhat
•	instrument would you choose and why?
	b. three instruments of your choice. Ask the client to choose one of
	these to playwhich three instruments do you choose and why?

Experiential 12: Elemental Play

The four common elements in existence are "earth", "wind", "fire", and "water". It is possible to creatively classify percussion instruments within these element types and consider what these elements may represent. Consider the following classifications or change them around, and creatively add your descriptors and instrument ideas to the list.

Earth:	Wind: Fire:		Water:	
grounded	mobile light	volatile purifying	mobile life-affirming	
Drums	Chimes	Gongs	Ocean Drum	
Scrapers	Whistles	Cymbals	Rainstick	
Wood Sticks		Thunder Drum		

- Divide into four groups (or four people) and assign one element to each group. Give corresponding "elemental" instruments to each group.
- 2. Have each group play their instruments by themselves.
- 3. Have entire group play together.



Found Sound and Do It Yourself Instrumentation

The term "found sound" describes musical instruments created out of everyday objects. Large water bottles, brooms, books, pots, pans, spoons, trash cans, and washtubs are simple examples of household items you can use as percussion instruments. Contemporary composers such as John Cage and performing groups like STOMP have helped to broaden percussion by promoting found sound objects

Some percussion instruments may be made at home. Egg shakers can be created from plastic Easter eggs filled with rice and sealed with a hot glue gun. Jingles can be constructed from thick dowel rods, bottle caps and nails. The possibilities are limited only to your creativity and patience.

Since finances are always a consideration for the music therapist, found sound objects and home made instruments may offer a way to stretch your budget. They also may offer your clients a creative experience (e.g. if you conduct an simple "instrument making workshop" in your sessions).

Resources for creating and playing found sound and do-it-yourself instruments are located in the resource section of the manual.

Percussion and Rhythm: Some General Considerations for Music Therapy

Rhythm

Rhythm, defined simply, is anything that recurs in time. Rhythm exists in all objects. Everything vibrates at some rhythmic frequency. Even inanimate objects vibrate at the subatomic level. We are surrounded by rhythms of gravity, electromagnetic fields, light waves, and sound. Our bodies sense and create rhythms daily. Our walking patterns, sleeping patterns, heart rates, neural processes, and body motions all occur in rhythms. Social structures can revolve around rhythms, and create new rhythms, such as our work and school schedules, or the celebration of birthdays and holidays. These rhythms are not necessarily constant, but rather change in order to adapt to circumstances. Rhythm and motion are inextricably linked. Perceived rhythm is most likely to be heard, seen, or felt.

Rhythm is also a fundamental element of music, perhaps the most fundamental of all. While music may exist without melody or harmony (at least by Western standards of such), it cannot exist without rhythm. The rhythm may not be consistent in a musical piece, but sound always repeats itself, and that structures our perception of the music.



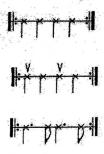
Pulse is an important aspect of rhythm. Pulse, defined in relation to music, is the underlying **consistent** rhythm that helps to structure a song or musical work. Sometimes the pulse is apparent, and sometimes it is more difficult to find. We might refer to the pulse in note values. For example, a piano work in triple meter have a quarter note pulse, or a dotted quarter note pulse, or a dotted half note pulse. A good way to determine the pulse is to listen and clap.

Listening for the Pulse

- Play tracks 24,25,26, and 27 from the CD for examples of pulse. While listening to each track, clap out the pulse you hear.
- 1. Pull out some of your favorite songs and listen to them. Clap out the pulse for each one. Are there any that are different, or are they generally the same?

Rhythmic Grounding

In some music therapy situations, you may want to provide a simple pulse to help structure an activity. This technique is called *rhythmic grounding*. The pulse you provide gives an audible reference point. You will also hear this referred to as a "heartbeat." The metaphor implied is appropriate. As the heart pulses to give us life, a foundational rhythmic pulse can give life to a musical experience. This technique is often used to assist improvisations, and often plays an important role in drum circles. Below are some simple rhythms that can provide pulse. Refer to the CD (tracks 28, 29, 30) if you wish.



When providing a pulse, it is important to choose an instrument that is audible, but not intrusive.

Experiential 13- Providing a "heartbeat": rhythmic grounding

- Review each "pulse" rhythm presented above as a class. Play them together.
- Set up a hypothetical music therapy activity by answering the following questions.
 - a. Individual or group setting? How many clients if a group?
 - What instruments are available to the group (choose from the following).
 - i. Shakers
 - ii. Rhythm sticks
 - iii. Hand Drums
 - iv. All
- With your hypothetical situation in mind, create a mock session in class using students.
- 4. Have volunteers lead the mock session in an improvisation by providing one of the "pulse" rhythms using different instruments, such as the:
 - a. Egg Shaker
 - b. Maraca
 - c. Cowbell
 - d. Hand Drum
 - e. Bass Drum
- 5. Ask the "clients" which instrument was easiest to relate to and which one was hardest to relate to. Which ones were too intrusive for the situation?

The amount of people and instrumentation available will help to determine which instruments are best to create a pulse. Cowbells are great for large groups, as are bass-type drums. A paddle drum might be more appropriate in a smaller group or individual session.

Three things to help you choose your instrument are:

- a sharply defined and short sound (which means some shakers, gongs, etc. will not work well)
- 2) appropriate volume
- 3) a different pitch or timbre than the clients' instruments.

Entrainment

Entrainment is the tendency for two rhythms to fall into synchrony. Christian Huygens noticed the physical theory in the mid 1600's, when he noticed pendulum clocks synchronizing their motion. In theory, entrainment occurs in order to conserve energy. Nature seeks to create the most efficient energy state, and that it less energy to pulse together than to pulse in opposition to each other. We can observe this occurrence physically and physiologically. Whether it be birds flying or people walking together, there tends to be a movement towards similar rhythms.

Entrainment is currently being explored for its therapeutic applications, both within and outside the field of music therapy. For our purposes, we will keep things simple. Interactive instrumental play can create musical entrainment. The longer two people interact musically, the more musically "in tune" they become with each other (that is, of course, until they get tired).

Experiential 14: Entrainment: Interactive Play

- Lead a group (from size of 2 to entire class) using one of the "pulse" rhythms mentioned on page 60. The entire group should play this pulse rhythm together. Let them know that you will cue to begin and end by counting to four in consistent rhythm. Everyone is to begin together on the next beat. (Whenever first using this count-off method with clients, demonstrate it).
- While leading, slowly speed up and slow down, and play louder or softer.
- 3. While leading, change your rhythm to a different rhythm (either one of the other rhythms shown on page 60 or a simple one that you make up, but keep the pulse in the same meter that you are already in). Invite the group to change their rhythm with you.
- Call the name of someone in your group and designate them as leader, repeat the process, but beginning with the rhythm already established.
- 5. Count to four and end the activity together, as mentioned above.

Iso-Principle

Related somewhat to entrainment is the iso-principle. The name apparently relates to the greek word *isomorphic*, which means same form or appearance. Ira Altschuler is often credited with coining the term in the 1940's, but others who preceded him, namely Esther Gatewood, Dr. W.P. Burdick, and Dr. Evan O'Neill Kane, contributed to the concept beforehand.

The simple but important point to note about the iso-principle is that we meet our clients where they are at, using music as a medium to do so. For example, if a client beats on a drum ferociously, you would respond similarly, striking an instrument with vigor and reflecting back the client's musical expression, or if a group of clients play soft and slow together, you would respond in kind. Once a meeting place is created, so is a point of departure towards the goals you are working on.

Rhythmic Imitation

Imitating rhythms can be a great place to create a "meeting place" with a client. It is also a great way to begin a musical conversation (Reflecting back what someone says to you is often a great way to understand and converse with people!) The musical idea is simple. When one person plays a rhythm, the other person copies it. You will also hear rhythmic imitation being called an echo. Either the therapist or client(s) can act as the echo. If you are working on rapport building, emotional expression, self-expression, and/or self-awareness, you may want to follow the client. If you are working on awareness of others, listening skills, attention to task, and/or focus, you may want the client to imitate you.

Experiential 15: Rhythmic Imitation:

- Create groups of two people, and choose a "leader" and an "echoer" between the two.
- Using small rhythm instruments; have the leader play a rhythm and the echoer copy it.
- The leader can play the same rhythm, elaborate on it (using more or less notes, dynamic changes, accents, tempo changes), or they can change it altogether. The echoer should continue to copy.
- 4. Change roles.

Rhythmic Cuing

Rhythmic cuing is used in music therapy practice to assist participants in beginning a musical experience, or a phrase within a musical experience, together. Just as a conductor offers the orchestra a beginning tempo, a music therapist offers clients the same. The music therapist may use an instrumental, verbal cues, and/or visual cues depending on the needs and goals of the client(s).

When giving a rhythmic cue: explain to the client(s) how you will be cuing. For example, tell the clients "I will play this cowbell in rhythm while I count to four. We will all come in together on the next beat."

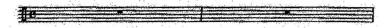
Call and response, another form of rhythmic cuing, is derived from various cultural music traditions from around the world, including Africa, Cuba, Brazil. Rhythmic call and response is occasionally mistaken for echo, but they are not the same thing. In an echo, the two phrases played are the same. In call and response, the response phrase will be different from the call. Take for example the following musical phrase....found on CD track 31



Many of us have played this call and response rhythm on a table without even thinking about it. As you can see and hear, the first phrase (call) sets up the timing of the second phrase (response). The same simple idea applies in the song If You're Happy and You Know It. In West African drumming, call and response are a part of the unique dialogue between lead and accompaniment drummers, as well as the drummers and dancers. Calls are used to begin and end pieces, to begin and end breaks and improvisations, and to call out structured motives. Call and response is certainly not limited to African drumming and dance, as it can also be heard in jazz melodies, Latin percussion in salsa (clave patterns), and blues lyrics, just to name a few other styles. Call and response can be used to creative musical motives, either previously structured or built upon in improvisations.

Experiential 16: Call and Response:

1. Write out a two bar rhythm phrase, with the first bar acting as a call, and the second bar acting as the response.

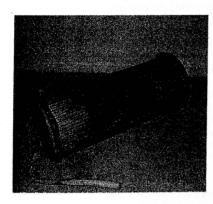


Call

Response

- Demonstrate the call and response to another person or a group, demonstrating each one bar phrase by name, then playing the entire call and response phrase yourself.
- 3. Play the call and have your participant(s) play the response.

Rhythmic "Chanting": Drumming and Language



Donno: Talking drum with stick

Many cultures have used the drum as a way to communicate. Some cultures have used drums to specifically imitate their language, in order to communicate their history, their lineages, and their poetry. Master drummers of the Dagomba tribe (Ghana) use the donno (do'-no). or talking drum, to speak their specific language through rhythm and inflection. Drum pitch, and therefore vocal inflection, changes by pressing in on the drum's rope. By manipulating the pitch and rhythm of the donno, master drummers call out the family names of audience members during performances, orate stories of history and lineage, and describe specific actions that are taking place. Techniques for using the talking drum will be discussed later in this book.

Experiential 17 - What is your name?

- Ask one person in the class/group to speak and tap their name out on an instrument (drum, rhythm instrument, desk, or lap).
- Everyone else in the group can then reflect their name and rhythm back to them.
- 3. Repeat this with each person in the class.
- Once everyone has had a turn, count out a medium tempo and have everyone play their individual rhythms together.
- You've just created a community of individuals through rhythmic language. Bravo!
- Invite people to add or subtract sounds to their name-rhythm. This is a good springboard for an improvisational drum circle.

Percussion and Improvisation

Percussion instruments lend themselves well to improvisation. They are accessible to everyone, dynamic, portable, and fun to play. The following offers concepts related to improvisation, as well as some ideas on how to use percussion for improvising.

Improvisation, put simply, is making music as you go. Musical improvisation allows each individual creative and expressive control of his/her own playing. No one is confined to an explicit structure, and for some clients, this makes improvisation an excellent modality. At the same time, some structure, if only as a springboard, is important. The great jazz improvisers are almost always using some structure to guide them. When we put together interventions that use improvisation, we have to ask the following questions to understand how to offer structure:

1) What am I looking to facilitate through this improvisation?

The goals you have in mind will help you to consider if and how improvisation will be used. Improvisation can work well with social interaction, rapport and trust building, expression, and self-awareness. Improvisations can be purely musical, or they can be used to facilitate verbal discussions.

2) What structure does this improvisation need to keep the client(s) feeling safe?

Your clients need an environment that allows them to explore, not one that overwhelms them or keeps them guessing what they are supposed to be doing. Begin your improvisation with a small musical container, meaning KEEP IT SIMPLE! Offer an anchoring structure, but don't impose it. Let the client feel free to explore when they are ready, and let the improvisation develop itself.

Musical Containers for Improvisation: Keeping it Simple

The following are some of the ways to create and contain musical improvisations.

- Rhythmic Grounding: (see page 62)
 Accompanying an improvisation with a steady pulse can give people a reference point and a safety net to fall back on if they feel lost. Works well for group settings.
- 2. Rhythmic Matching: (see "Entrainment" page 64)
 By matching rhythms, you also create a beginning bond with which to expand musical ideas. In terms of freer improvisations, this works best in individual settings. You can also use this idea with group improvisations, but it won't be as recognizable amidst many voices.
- Rhythmic Imitation (Echo): (see page 65)
 By imitating rhythms, you and your client(s) can create a beginning musical bond with which both of you are free to expand.
- Rhythmic cuing: (see page 66)
 Perhaps most easily used with higher functioning clients.
- Rhythmic chanting: (see page 68)
 You may begin by having clients play their names on
 the drum. You can then invite them to add new
 sounds to their name-rhythm.

Other IMPORTANT considerations for improvisation:

 Allow clients to choose their own instruments at the outset:

They will feel more comfortable and confident about playing, and you will learn something about their preferences. You will probably get a variety of instrumentation in groups, and in those rare instances where you need to change instrumentation for some reason, you will find out soon enough.

· Give eye contact and smiles

Make it fun and engaging for everyone, they may just look and smile back. If clients know you are enjoying yourself, they are going to feel more comfortable in the experience.

· Keep a sense of humor:

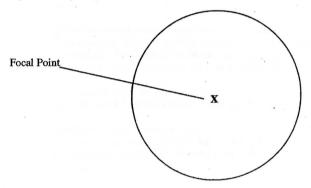
There really are no mistakes in improvisation, but a great way to let clients know that it is OK to make mistakes is to laugh when you do something you didn't mean to.

Group Drumming and Drum Circle Facilitation

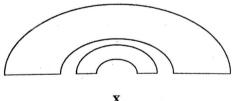
Group Drumming: Environment

It is always important to create a physical environment that facilitates the goals you are trying to achieve. Group drumming is often used for social awareness, social cohesion, and social interaction.

In many cases, circles are a wonderful shape to facilitate social interaction. Participants in a circle group can see everyone else. There is no explicit focal point, but the center of the circle can become one.



Sometimes, the room, amount of clients, or other factors will not allow a circle to be created. In these cases, a semi-circle can offer many of the same attributes. In the cases of larger groups with room size considerations, multiple semi-circles offer the best visibility for the situation.



Focal Point

Drum Circles

What is a drum circle?

Drum circles consist of a group of people playing percussion instruments together, usually with self-expression and community in mind. In the case of music therapy and wellness, the goals and objectives may differ and/or become more specific.

What is a drum circle facilitator?

A drum circle facilitator does not "lead" the event, but rather creates an environment that fosters growth and progress towards the desired therapeutic aims. For example, if you are looking to create an environment for personal expression and initiative, you may offer each person an invitation to solo on a large instrument in the middle of the circle while everyone else accompanies. I your objective is primarily social cohesion, you may create a group drumming environment that invites people to listen to each other, perhaps by cuing small groups to stop and listen while others play.

How do I direct the environment of the circle?

- 1. Before beginning the circle
 - a. invite everyone to choose an instrument to play
 - b. let everyone know that this is not a drum class, but rather a gathering for everyone to explore playing, no experience necessary
 - briefly demonstrate hand drum technique so people are less likely to hurt their hands.
 - Keep in mind any therapeutic aims you have... If appropriate, mention them to the group.
- 2. The first thing you need to create a group rhythm is a grounded rhythm. Refer back to page 60 for commonly used rhythms. If you have a partner helping you, or someone who you know has good rhythm present, have them play the pulse on a bass drum. This will allow you more freedom to sculpt the direction of the circle. Otherwise, you may need to provide the pulse more often, using a cowbell.
- If the instruments chosen are not varied enough, place the desired voices next to people, and encourage everyone to try new instruments when they wish.

The following pages give some rudimentary examples of sculpting a group drumming event using musical elements and various types of cuing.

Prum Circles: New Directions

A drum circle facilitator may want to offer new musical paths to the players. The direction you head in may consist of one or more the following musical properties.

- Rhythm- transition into a new pulse or a meter change
- Tempo- play faster or slower, double time or half-time
- Dynamics- play louder and softer, and use silence
- · Textures- use different instruments at different times

There are several ways to cue these changes. Each of them can be useful, and you often will want to use more than one type of cue at a time.

- · Verbal telling drummers what you want to happen.
- Visual Cuing- using signals that are easy to understand.
- Cuing with instrument- Playing your instrument in a way that cues the change.

Also, we should consider whom we are cuing.

- Everyone
- Part of the group, related by location
- Part of the group, related by instrumentation
- Individuals: Our "heartbeat helpers" (those who create the pulse), or soloists

When using visual cues, it's important to:

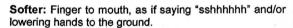
- Be Visible! Place yourself as a focal point so everyone can see you.
 If you are addressing the whole group, get in the center of the circle, or a central, visible location in a semi-circle (see page 73). If you are addressing a smaller group of people or an individual, move closer to them.
- Gain eye contact before cuing! It is much more likely they will follow you.
- · Use large and obvious cues!

Facilitating a drum circle with visual cues is similar to conducting, but using simple symbols. Below are some commonly used visual cues.





Louder: Hand raised to ear or raising hands above head. Using both usually gets the point across.





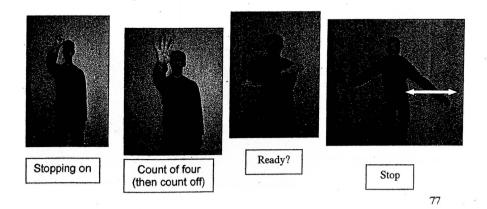


Faster: Point finger in the air and mark the accelerated tempo with it. Do this while marching to push the tempo up (make sure your heartbeat player is cued first and is following your lead!).

Slower: Honestly, slower tempos are likely not something you are going to look for when a rhythm is moving forward. And even if you wanted to, visual cuing by itself will probably not allow a ritardando to happen.... unless everyone is playing the exact same rhythm together, you've got an incredibly advanced group of players, or you are creating a very dramatic slowdown for a dramatic finish. If you are looking for it to happen, punctuate the current rhythm with your arms and slow town the tempo, like a conductor.



Stop: When you stop a group, make sure you warn them that you will "count off" and that they stop at the end of the count. Warn them with a closed fist and the count (4 usually works well). Then, give a visual count off of the numbers 1-4 in rhythm, and sweep your arms apart as in the pictures (which is similar to "finished" in sign language, and also looks similar to a double-handed conductors cutoff....interesting).

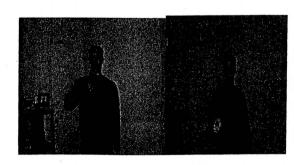




Keep going: Roll your hands around each other while stomping the current pulse with your feet.

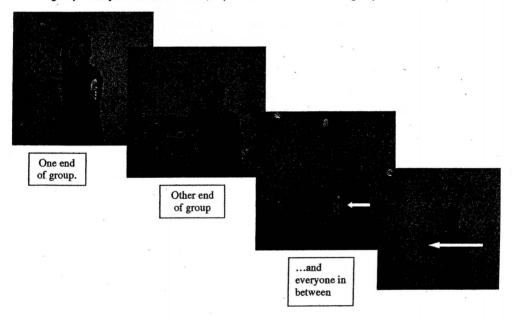


Rumble (everyone play fast and thunderous!): Move your hands in the air quickly as if you are air drumming. If you do this for the first time, you will need to demonstrate it on an instrument.



Taking turns between facilitator and participants: Signal to yourself for your own play and to the group or individual for their play...useful for an echo (see page 63) or visually cuing a call and response (see page 64).

Cuing a partial group: Cuing a partial group is kind of like slicing into a pie and scraping. Point to both "endpoint", meaning the end people in your designated group. Then, bring one hand to meet the other, gaining eye contact with everyone in between the end points. Now you are able to tell this part of the group what you want them to do, separate from the rest of the group.



Cuing specific instrumentation: It's best in this case to cue by holding up the instrument type....so if you want shakers only, hold up a shaker, etc..

Experiential 18: Drum Circle Cuing

- 1. With a group, create a circle environment. Place percussion instruments in the center of the circle and allow people to choose their instruments.
- Take turns facilitating the group. If possible, have a partner play a bass drum to assist with the pulse.
- Begin facilitating by offering participants a brief invitation to play. Ask them to listen to the pulse, and join in playing that pulse, or whatever they wish, when they feel like it.
- 4. Create a simple pulse on a cowbell, cuing your partner to join you.
- Once the rhythm gets going, enter the focal point (as on page 73), and try sculpting two of the following:
 - a. Dynamics
 - b. Tempo
 - c. Rumble
 - d. Partial group stop and reentry
 - e. All stop except for certain kind of instrument (e.g. all shakers continue)
- 6. After completing two cues, cue the entire circle to stop.
- 7. Repeat process with new person.

Percussion and Physical Adaptation:

Some clients may require adapted instrumentation or adaptive approaches to playing in order to play percussion instruments.

When considering using percussion with clients, the therapist should consider:

- 1a. the client's range of motion
- 1b. the range of motion commonly required to play the instrument
- 1c. ways the type or range of motion used can be adapted
- 2a. the client's grasping/holding abilities
- 2b. how the instrument is commonly held, if at all
- 3c. ways the type of grasp used can be changed or adapted
- 3a. the strength/endurance of the client
- 3b. the weight of the instrument or striker
- 3c. ways the instrument/striker can be adapted to match the client's abilities

Adaptive resources for percussion instruments are included in the resources section.

Suggested Resources

Hand Drums:

Dworsky, A. & Sansby B. (2000). How to play djembe. Minnetonka, MN: Dancing Hands Music.

Dworsky, A, Sansby, B. (2001). Hip grooves for hand drums. Minnetonka, MN: Dancing Hands Music.

James, B. (2000). Have fun playing hand drums. Miami, FL: Warner Brothers.

Group Drumming/Rhythm Instruments:

Schmid, W. (1998). World music drumming. Milwaukee WI: Hal Leonard.

Wajler, Z. (2002) World beat fun: Multicultural and contemporary rhythms for K-8 classrooms. Miami, FL: Warner Brothers.

Drum Circles:

Hull, A. (1998). Drum circle spirit: Facilitating human potential through rhythm. Tempe, AZ: White Cliffs Media.

Stevens, C. (2003). The art and heart of drum circles. Milwaukee, WI: Hal Leonard.

Adaptive Instrumentation:

Clark, C., & Chadwick, W. (1979). Clinically adapted instruments for the multiply handicapped. Westford, MA: Modulations (distributed by MMB).

Elliot, B. (1982). Guide to the selection of musical instruments with respect to physical ability and strength. Philadelphia PA: LINC Resources (distributed by MMB).

Abilitations: abilitations.com

A Day's Work: adaysworkmusiceducation.com

Suggested Resources

Found Sound/ Homemade Instruments:

http://www.rhythmweb.com/homemade/index.html http://www.nancymusic.com/PRINThomemade.htm

Drum/Instrument Makers:

Remo: remo.com

Latin Percussion: latinpercussion.com

Toca: tocapercussion.com

Drumskull Drums: drumskulldrums.com
Rhythm Band Instruments: rhythmband.com

Cymbal/Gong Makers:

Zildjian: zildjian.com Sabian: sabian.com Paiste: paiste.com

Wuhan: wuhancymbals.com