

# Current Research in Complementary & Alternative Medicine

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## Image Article

# Trials of Additional Effective Movements for Music Therapy Session for the Elderly

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## Abstract

Authors have dealt with Shikoku division of Integrative Medicine Japan (IMG), and reported various activities such as music therapy. Currently, we have tried additional effective movements including the game of rock-paper-scissors (RPS), and the gesture of sign language (SL) to the music. RPS seems to be effective for cognitive and motor function exercises, as well as singing, speech, verbal communication, movements of extremities and so on. From SL and vocal communication, people can distinguish word, sentence, and discourse levels of integration. By Japanese SL to the music, people can understand the poem and rhythmical movements of finger and body.

**Keywords:** Complementary and Alternative Medicine (CAM); Integrative Medicine (IM); Integrative Medicine Japan (IMG); Music therapy; Rock, paper, scissors; Sign language

## Introduction

Complementary and Alternative Medicine (CAM) and Integrative Medicine (IM) have become more prevalent across the world [1,2]. Their clinical efficacy and significance have been known, and authors have continued management of Shikoku division of Integrative Medicine Japan (IMG) for long [3]. We have reported various activities of CAM and IM, such as music therapy, reminiscence therapy, psychotherapy, egogram, thermal therapy, hot spring therapy, cardiac rehabilitation and so on [4,5].

Among them, our colleagues have continued music therapy sessions in some hospitals [6]. Currently, we have provided music therapy session, in which some trials of additional effective movements were associated. In this article, discussion concerning these matter would be described.

Our music therapy session was conducted in December 2019. It was a Christmas concert and music therapy session in the broad lobby of Eto Hospital, Tokushima, Japan (Figure 1). The presentation

included classical and popular songs by children choir, music and reminiscence therapy to elderly people, mutual communication between our staffs and audience, rhythmical exercise accompanied with music, and others.



**Figure 1:** Music therapy session with additional effect of gesture in sign language.

In the session, we always pay attention to mutual communicating with the audience [7]. Especially, adequate question can bring the stimulus to their memory as reminiscence therapy [8]. Furthermore, we have tried some new trials of additional effective

movements. The first one is the game of “Rock, paper, scissors!” included in the music therapy session. The second is the gesture of sign language to the music. These two topics were described as follows.

Firstly, the game of “Rock, paper, scissors” was included in the session, which was originally from Japanese tradition and custom [9] (Figure 2). It can be used not only for pleasure, but also for rather difficult exercise of finger movement. The method is as follows: i) the finger number of rock-paper-scissors is 0-5-2, respectively, ii) the audience change the number of their bilateral fingers to the rhythm of the music, iii) its example is 0-2-5, or 5-2-0, iv) the movement is accompanied by gesture of the hands, body and legs.



**Figure 2:** Music therapy session with additional effect of movement in rock- paper-scissors

Similar to toss up game in European countries, rock-paper-scissors game can bring increased communication skills in our daily life and society [9,10]. During our session of music therapy, we include rock-paper-scissors game expecting for elevating pleasant mood of the clients.

From medical view point, rock-paper-scissors game can be useful for elderly people [11]. Dementia has been one of the main diseases necessary for long care. In order to give dementia people adequate treatment, care and prevention, several trials such as cognitive function exercises and motor function exercises are effective. They include music therapy, reminiscence therapy, as well as singing, speech, verbal communication, movements of hand and legs, rhythm game, rock-paper-scissors game, and so on [11].

This game has been studied concerning the interactive activity of human and Artificial Intelligence (AI) [12]. In the medical and welfare facilities, such apparatus of AI or Visual Reality (VR) may be involved in the ordinary cure, care and management for patients and clients in the future.

Secondly, sign language was presented by the gesture of the children choir. It was presented along the poem of the music of Japanese traditional folk song “hometown” (Figure 1). Sign language is a visual language that uses both finger movements and

non-manual signals at the same time, and is a language similar to speech language. It is full-fledged natural language with their own grammar and lexicon. Many sign languages are currently used in the world, and they are not universal or mutually intelligible with each other. However, there are striking similarities among them.

From both of sign languages and vocal communication, people can distinguish word, sentence, and discourse levels of integration. There was a research for these three language tasks in Japanese sign language [13]. As a result, the unification of functional and anatomical studies was shown for understanding human language systems from the aspects of both universality and individuality.

Linguists usually consider both of sign and speech communication as natural language. They emerged through natural aging process and evolved through various experiences for long time [13]. Sign language has been used for not only people of hard of hearing and the deaf, but also those who have troubles with speech or various disabilities and their family members.

There was a discussion of signed music and deaf musicking [14]. The notions of the deaf and music may be recognized as antithetical. It has been thought that the deafness in culture would be silence, while music seems to be the opposite. Both of deaf and non-deaf scholars suggested that deaf human body could feel how music transcends sound as a sensory experience.

In Japanese sign language, there are two classifications [15]. One is the finger letters indicating pronunciation such as Japanese syllabary, and another is the body gestures showing the appearance or meaning of the words [16]. Consequently, Japanese well-known traditional songs are easily understood by anyone, associated with poem, rhythmical movements of finger and body.

In summary, authors have tried additional effective movements in the music therapy session. They were the game of Rock-paper-scissors to the rhythm the music, and gesture of sign language to the poem of the music. We hope current description will become useful reference for the future research and practice of music therapy in the medical area of CAM and IM.

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